

12th Anniversary ALL STAR ISSUE

THE MAGAZINE OF  
**Fantasy AND**

**Science Fiction**

OCTOBER

40¢

***Naked to the Stars***

**GORDON R. DICKSON**

**POHL & KORNBLUTH**

**CHARLES G. FINNEY**

**GEORGE LANGELAAN**

**KURT VONNEGUT**

**ISAAC ASIMOV**

**EVELYN E. SMITH**



# Fantasy and Science Fiction

OCTOBER *Including Venture Science Fiction*

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Cover by Chesley Bonestell  
(landing on the moon)

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The Magazine of Fantasy and Science Fiction, Volume 21, No. 4, Whole No. 125, OCT. 1961. Published monthly by Mercury Press, Inc., at 40¢ a copy. Annual subscription \$4.50 in U. S. and Possessions and Canada. \$5.00 in the Pan American Union; \$5.50 in all other countries. Publication office, 10 Ferry Street, Concord, N. H. Editorial and general mail should be sent to 580 Fifth Avenue, New York 36, N. Y.; advertising mail to P. O. Box 271, Rockville Center, N. Y. RO-6-3831. Second class postage paid at Concord, N. H. Printed in U. S. A. © 1961 by Mercury Press, Inc. All rights, including translations into other languages, reserved. Submissions must be accompanied by stamped, self-addressed envelopes; the Publisher assumes no responsibility for return of unsolicited manuscripts.

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## **In this issue . . .**

We are most pleased to report that Charles G. Finney ("The Captivity," page 25) has a new book coming out after all these years—THE OLD CHINA HANDS, to be published by Doubleday this fall. Also, THE CIRCUS OF DR. LAO has recently been issued as a Viking Compass book. . . .

It seems time to mention again that acceptable original suggestions for Ferdinand Feghoot adventures will be rewarded with one-year free subscriptions to this magazine. Note that word "original"—Mr. Briarton reports that he has received rather too many ideas borrowed from the works of Bennett Cerf. Also, please mention in connection with all submissions that the subscription is acceptable as full recompense.

## **Coming soon . . .**

Our inventory situation is particularly healthy these days—in addition to novelets by Edgar Pangborn, Poul Anderson, and Brian W. Aldiss, we have on hand a largish number of good things by such as Herbert Gold, Ward Moore, Fritz Leiber, James Blish, George P. Elliott, Richard Matheson, and Avram Davidson . . . as well as some particularly interesting pieces by names not yet quite as well known. To be sure of missing none of all this, fill in the coupon below. . . .

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*The author of SIRENS OF TITAN, with a mordant little tale with rather more to say than its size would indicate . . .*

# HARRISON BERGERON

*by Kurt Vonnegut, Jr.*

THE YEAR WAS 2081, AND everybody was finally equal. They weren't only equal before God and the law, they were equal every which way. Nobody was smarter than anybody else; nobody was better looking than anybody else; nobody was stronger or quicker than anybody else. All this equality was due to the 211th, 212th, and 213th Amendments to the Constitution, and to the unceasing vigilance of agents of the United States Handicapper General.

Some things about living still weren't quite right, though. April, for instance, still drove people crazy by not being springtime. And it was in that clammy month that the H-G men took George and Hazel Bergeron's fourteen-year-old son, Harrison, away.

It was tragic, all right, but George and Hazel couldn't think about it very hard. Hazel had a perfectly average intelligence, which meant she couldn't think about anything except in short

bursts. And George, while his intelligence was way above normal, had a little mental handicap radio in his ear—he was required by law to wear it at all times. It was tuned to a government transmitter, and every twenty seconds or so, the transmitter would send out some sharp noise to keep people like George from taking unfair advantage of their brains.

George and Hazel were watching television. There were tears on Hazel's cheeks, but she'd forgotten for the moment what they were about, as the ballerinas came to the end of a dance.

A buzzer sounded in George's head. His thoughts fled in panic, like bandits from a burglar alarm.

"That was a real pretty dance, that dance they just did," said Hazel.

"Huh?" said George.

"That dance--it was nice," said Hazel.

"Yup," said George. He tried to think a little about the ballerinas. They weren't really very good—



no better than anybody else would have been, anyway. They were burdened with sashweights and bags of birdshot, and their faces were masked, so that no one, seeing a free and graceful gesture or a pretty face, would feel like something the cat dragged in. George was toying with the vague notion that maybe dancers shouldn't be handicapped. But he didn't get very far with it before another noise in his ear radio scattered his thoughts.

George winced. So did two out of the eight ballerinas.

Hazel saw him wince. Having no mental handicap herself, she had to ask George what the latest sound had been.

"Sounded like somebody hitting a milk bottle with a ball-peen hammer," said George.

"I'd think it would be real interesting, hearing all the different sounds," said Hazel, a little envious. "The things they think up."

"Um," said George.

"Only, if I was Handicapper General, you know what I would do?" said Hazel. Hazel, as a matter of fact, bore a strong resemblance to the Handicapper General, a woman named Diana Moon Glampers. "If I was Diana Moon Glampers," said Hazel, "I'd have chimes on Sunday—just chimes. Kind of in honor of religion."

"I could think, if it was just chimes," said George.

"Well—maybe make 'em real loud," said Hazel. "I think I'd make a good Handicapper General."

"Good as anybody else," said George.

"Who knows better'n I do what normal is?" said Hazel.

"Right," said George. He began to think glimmeringly about his abnormal son who was now in jail, about Harrison, but a twenty-one gun salute in his head stopped that.

"Boy!" said Hazel, "that was a doozy, wasn't it?"

It was such a doozy that George was white and trembling, and tears stood on the rims of his red eyes. Two of the eight ballerinas had collapsed to the studio floor, were holding their temples.

"All of a sudden you look so tired," said Hazel. "Why don't you stretch out on the sofa, so's you can rest your handicap bag on the pillows, honeybunch." She was referring to the forty-seven pounds of birdshot in a canvas bag, which was padlocked around George's neck. "Go on and rest the bag for a little while," she said. "I don't care if you're not equal to me for a while."

George weighed the bag with his hands. "I don't mind it," he said. "I don't notice it any more. It's just a part of me."

"You been so tired lately—kind of wore out," said Hazel. "If there was just some way we could make

a little hole in the bottom of the bag, and just take out a few of them lead balls. Just a few."

"Two years in prison and two-thousand dollars fine for every ball I took out," said George. "I don't call that a bargain."

"If you could just take a few out when you came home from work," said Hazel. "I mean—you don't compete with anybody around here. You just set around."

"If I tried to get away with it," said George, "then other people'd get away with it—and pretty soon we'd be right back to the dark ages again, with everybody competing against everybody else. You wouldn't like that, would you?"

"I'd hate it," said Hazel.

"There you are," said George. "The minute people start cheating on laws, what do you think happens to society?"

If Hazel hadn't been able to come up with an answer to this question, George couldn't have supplied one. A siren was going off in his head.

"Reckon it'd fall all apart," said Hazel.

"What would?" said George blankly.

"Society," said Hazel uncertainly. "Wasn't that what you just said?"

"Who knows?" said George.

The television program was suddenly interrupted for a news bulletin. It wasn't clear at first as

to what the bulletin was about, since the announcer, like all announcers, had a serious speech impediment. For about half a minute, and in a state of high excitement, the announcer tried to say, "Ladies and gentlemen—"

He finally gave up, handed the bulletin to a ballerina to read.

"That's all right," Hazel said of the announcer, "he tried. That's the big thing. He tried to do the best he could with what God gave him. He should get a nice raise for trying so hard."

"Ladies and gentlemen—" said the ballerina, reading the bulletin. She must have been extraordinarily beautiful, because the mask she wore was hideous. And it was easy to see that she was the strongest and most graceful of all the dancers, for her handicap bags were as big as those worn by two-hundred-pound men.

And she had to apologize at once for her voice, which was a very unfair voice for a woman to use. Her voice was a warm, luminous, timeless melody. "Excuse me—" she said, and she began again, making her voice absolutely uncompetitive.

"Harrison Bergeron, age fourteen," she said in a grackle squawk, "has just escaped from jail, where he was held on suspicion of plotting to overthrow the government. He is a genius and an athlete, is under-handicapped, and is extremely dangerous."

A police photograph of Harrison Bergeron was flashed on the screen—upside down, then sideways, upside down again, then right-side up. The picture showed the full length of Harrison against a background calibrated in feet and inches. He was exactly seven feet tall.

The rest of Harrison's appearance was Halloween and hardware. Nobody had ever born heavier handicaps. He had outgrown hinderances faster than the H-G men could think them up. Instead of a little ear radio for a mental handicap, he wore a tremendous pair of earphones, and spectacles with thick, wavy lenses besides. The spectacles were intended not only to make him half blind, but to give him whanging headaches besides.

Scrap metal was hung all over him. Ordinarily, there was a certain symmetry, a military neatness to the handicaps issued to strong people, but Harrison looked like a walking junkyard. In the race of life, Harrison carried three-hundred pounds.

And to offset his good looks, the H-G men required that he wear at all times a red rubber ball for a nose, keep his eyebrows shaved off, and cover his even white teeth with black caps at snaggletooth random.

"If you see this boy," said the ballerina, "do not—I repeat, do not—try to reason with him."

There was the shriek of a door being torn from its hinges.

Screams and barking cries of consternation came from the television set. The photograph of Harrison Bergeron on the screen jumped again and again, as though dancing to the tune of an earthquake.

George Bergeron correctly identified the earthquake, and well he might have—for many was the time his own home had danced to the same crashing tune. "My God!" said George. "That must be Harrison!"

The realization was blasted from his mind instantly by the sound of an automobile collision in his head.

When George could open his eyes again, the photograph of Harrison was gone. A living, breathing Harrison filled the screen.

Clanking, clownish, and huge, Harrison stood in the center of the studio. The knob of the uprooted studio door was still in his hand. Ballerinas, technicians, musicians and announcers cowered on their knees before him, expecting to die.

"I am the Emperor!" cried Harrison. "Do you hear? I am the Emperor! Everybody must do what I say at once!" He stamped his foot and the studio shook.

lowed, "crippled, hobbled, sickened—I am a greater ruler than any man who ever lived! Now

"Even as I stand here," he bel-

watch me become what I *can* become!"

Harrison tore the straps of his handicap harness like wet tissue paper, tore straps guaranteed to support five thousand pounds.

Harrison's scrap-iron handicaps crashed to the floor.

Harrison thrust his thumbs under the bar of the padlock that secured his head harness. The bar snapped like celery. Harrison smashed his headphones and spectacles against the wall.

He flung away his rubber-ball nose, revealed a man that would have awed Thor, the god of thunder.

"I shall now select my Empress!" he said, looking down on the cowering people. "Let the first woman who dares rise to her feet claim her mate and her throne!"

A moment passed, and then a ballerina arose, swaying like a willow.

Harrison plucked the mental handicap from her ear, snapped off her physical handicaps with marvelous delicacy. Last of all, he removed her mask.

She was blindly beautiful.

"Now—" said Harrison, taking her hand. "Shall we show the people the meaning of the word dance? Music!" he commanded.

The musicians scrambled back into their chairs, and Harrison stripped them of their handicaps, too. "Play your best," he told

them, "and I'll make you barons and dukes and earls."

The music began. It was normal at first—cheap, silly, false. But Harrison snatched two musicians from their chairs, waved them like batons as he sang the music as he wanted it played. He slammed them back into their chairs.

The music began again, and was much improved.

Harrison and his Empress merely listened to the music for a while—listened gravely, as though synchronizing their heart-beats with it.

They shifted their weight to their toes.

Harrison placed his big hands on the girl's tiny waist, letting her sense the weightlessness that would soon be hers.

And then, in an explosion of joy and grace, into the air they sprang!

Not only were the laws of the land abandoned, but the law of gravity and the laws of motion as well.

They reeled, whirled, swiveled, flounced, capered, gamboled and spun.

They leaped like deer on the moon.

The studio ceiling was thirty feet high, but each leap brought the dancers nearer to it.

It became their obvious intention to kiss the ceiling.

They kissed it.

And then, neutralizing gravity with love and pure will, they remained suspended in air inches below the ceiling, and they kissed each other for a long, long time.

It was then that Diana Moon Glampers, the Handicapper General, came into the studio with a double-barreled ten-gauge shotgun. She fired twice, and the Emperor and the Empress were dead before they hit the floor.

Diana Moon Glampers loaded the gun again. She aimed it at the musicians and told them they had ten seconds to get their handicaps back on.

It was then that the Bergerons' television tube burned out.

Hazel turned to comment about the blackout to George. But George had gone out into the kitchen for a can of beer.

George came back in with the

beer, paused while a handicap signal shook him up. And then he sat down again. "You been crying?" he said to Hazel, watching her wipe her tears.

"Yup," she said.

"What about?" he said.

"I forget," she said. "Something real sad on television."

"What was it?" he said.

"It's all kind of mixed up in my mind," said Hazel.

"Forget sad things," said George.

"I always do," said Hazel.

"That's my girl," said George. He winced. There was the sound of a rivetting gun in his head.

"Gee—I could tell that one was a doozy," said Hazel.

"You can say that again," said George.

"Gee—" said Hazel—"I could tell that one was a doozy."



## ***F&SF—The Sun Never Sets On***

The Magazine of FANTASY AND SCIENCE FICTION is now being sent to seventy-two countries and territories of the world and to all seven continents.

From Afghanistan to Zanzibar and from Iceland to New Zealand, (including some countries behind the iron curtain) there are readers enjoying F&SF in English, in French or in Japanese.

This is most gratifying both to the editor and the publisher. More important, we believe it reflects a growing worldwide interest in stories and articles with imagination and vision.

*No matter what people say, one place, as Quant Aut discovered, is not just like another. Consider, for example, the wicked planet Chromata . . . .*

## THE ULTIMATE SIN

*by Rosel George Brown*

HAVING TRAVELED MUCH, Quant should, as he had been told he would, have found that one place is so like another that one had just as well stay home and look for bluebirds in one's back yard.

This rule, however, applies only to those who keep finding themselves wherever they go. Quant had avoided himself all his life, probably by accident. There is supposed to come to each of us, in our adolescence, that point of self-realization, of identity, when one says, My name is Quant Aut and I am I, with all that implies. And then, had this happened, say, to Quant, he would have painted himself blue (or whatever) to frighten his enemies and ornamented himself with a torque (or whatever) to please his friends and within a short time no one, least of all Quant Aut, would have suspected he had not been born with these appurtenances and would carry them to the grave.

Quant, as it happened, was asleep or perhaps had a bad cold on Self-realization Day, and therefore remained a child well into his adulthood.

Anyway, one place is *not* like another.

There had been, for instance, the planet Erx, which no one had ever seen but Quant Aut. The planet Erx, it is true, was a scientific anomaly—but more of the planet Erx later.

At the moment Quant Aut, whose ship had been landed by automatic controls while he finished the process of emerging from suspended animation—at the moment . . . but it seems so unlikely! Quant, who had all his life believed *everything*—which is the only way to learn things, as children do—Quant for the very first time could not believe his eyes.

There had been no question on the planet Erx, you understand. He saw the thing and that made it real, and if the scientists came



along later and proved it was there by means of the most delicate instruments with indescribable names, that was all right. If, on the other hand, they had proved it was not there, that would have been their loss and not Quant's.

But what Quant sees now, or thinks he sees, and he is at this moment losing his innocence—not around him, where it should be, but below him as he walks out and stands on air, is a world sparkling with all the colors unknown to man. -

*Unknown to man.*

Not mauve or off-orange, but completely new colors, which Quant could naturally not describe or compare to anything at all. If you knew only blue, how would you describe red?

It hurt his eyes and it hurt the inside of his mind and he was immediately afraid of it. It was alien as nothing else had ever been alien—something even Tennyson could not have been a part of and for which the bell would not toll.

It was, of course, evil—as it could not possibly be included in the Humanities—and Quant stood and gazed down at the evil of it and the alienness of it, and as his childhood passed from him and the scales fell from his eyes (or rose before them, depending on your view of maturity) and what had previously been in him a spirit of adventure and a childlike curiosity about life and creation—be-

came an exultant desire to plumb depths no man had ever plumbed before, to align himself with unnatural forces, to do something utterly unhuman, utterly monstrous utterly unique.

In short, to sin.

Now Quant was a Unitarian, and as such had been short on sin, Unitarians normally have to figure out what is sinful and then do it and then decide whether or not they should feel guilty, and by the time they've done all that it isn't fun any more—like having to explain the punch line of a joke.

Quant knew that what he was supposed to do, upon discovery of such a planet, was radio back his coordinates and a description of the planet, along with the automatic information from the Planet Analysis tapes, which were recording automatically, or had he remembered to turn them on? All this so that in case he died or got lost at least his initial discovery would not be lost to science. And also because if he failed to report in later, and someone should notice it, and if there were a ship happening to be going nearby (an unlikely eventuality), rescue might possibly be contemplated. Mostly rescue was too expensive, but there was always hope.

So, to forestall the possibility of an unwelcome rescue, Quant took the precaution of making sure he hadn't switched on any communications equipment by mistake.

And prepared to descend into the fulminating colors and shapes of the wicked planet Chromata—for he named it Chromata.

Chromatose, he thought, gazing down through the clear atmosphere. I am becoming chromatose.

Quant checked the planetary analysis—which showed, for one thing, that the planet did not exist and for another that the atmosphere was deficient in oxygen.

Still, there *was* oxygen (some) and atmosphere and nothing poisonous to the lungs, so Quant re-entered his ship—with some little difficulty as he found the wind had blown both he and it about a little—and removed his clumsy suit.

He inserted an oxygen capsule into his saphena magna, managing, because he'd had plenty of practice, to spill no blood at all, and he closed the temnomy smoothly on the vein of his ankle and again on his epidermis.

It was a very useful thing to have, this temnomy. Observing suitable sterility, one could insinuate medication into the bloodstream without needles, and the opening and closure were smooth and painless, the flesh binding like the closure on a skinsuit. It was also—the occasion for this does sometimes arise in the life of an adventurer—a suitable spot for quick-acting poison—quicker and less distasteful than swallowing something or cutting something.

Quant then strapped on his pack, which was an easy enough process because he and the contents of his ship were behaving as though they were in free fall—which, according to the instruments they were not. Instruments, however, have their limitations, it being a tricky business to define stasis, since a ship stationary on a planet is moving in the direction and with the speed of the planet's rotation, and also its revolution, not to speak of its acceleration with respect to its galaxy, and the acceleration of its galaxy with respect to the rest of existence, and other unthinkable things.

Quant stepped out of his ship again and realized thoroughly that he was not going to fall to the surface of the planet. Within a hundred miles of the planet, watching its slow, color-twinkling rotation beneath him, he was not falling to it.

The planet Erx, which he had considered the living end, was no precedent. Indeed, he now realized the planet Erx was humanoid.

The planet Erx was simply very tenuous. But this fact did not make it register non-existent on the instruments. It had mass and gravity one-tenth that of earth—though of course the curious behavior of the inhabitants of Erx . . . but more of that later.

Gravity—of course. Quant laughed aloud and called himself several bad names—a habit ac-

quired by lone travelers who have no companion to so designate.

"You sib of a Grilch!" he shouted. (This filthy expression came from a creech house in the lower Venusian swamp area.) "You postprandial trachelesthial . . ."

The planet must be without gravity, which was why his instruments did not recognize its existence.

Then how did it hold its atmosphere? Not speak of the anargent glitter of sinuosities that one would assume were the various shapes of planetary water.

The atmosphere had weight—at least it had resistance—though musn't all matter? Perhaps the gravity was in the matter *on* the planet, the extraneous matter attracting the planet unto itself rather than the usual reverse situation.

In which case if there were any attracting to be done, it would have to be done by Quant. And since the ship's instruments had no provision for landing on a non-gravitic planet, it being difficult, in the absence of gravity, to tell which way is down and to ascertain when bottom is reached, Quant would have to land the ship himself. Manually. That is, he would have to tug it down with his hands.

Whereupon Quant lowered the ship to within fifty feet of the surface—as low as he dared chance a possible crash—and got out of the ship and drifted the rest of the

way down by squirting compressed oxygen at the sky and pulling the ship along behind him by a handhold.

Set amidst a confounding kako-phany of color, his senses disordered by an atmosphere of danger from moving forms—entelechally alarming, not red but of red meaning—Quant felt his space ship tugged at, and winds blowing, and wondered if he would have to tie it by a string to his hand and tug it around after him like a toy balloon.

Something *was* tugging at it. Not blowing winds.

Something pulled at the ship, and, now more strongly, Quant dragged along behind.

He was beginning to be very much afraid. Not only for his human soul, which is really rather vague and usually disappears on sunny mornings, but for his life. What weapons would he need, here where the Humanities did not apply? Not, no doubt, the ones he had.

He shook at his head, trying to clear it of color, so as to be able to see the moving shapes around him. Color and form should be two different things. But for him they blurred here. He fought to open his mind as in nightmares he'd fought to open weighted eyes.

Sounds, too. There was a surruration of sounds, whistling softly in waves and having a physical touch about them, as though they

roughed the hairs of his body.

Quant shut his eyes tight and tried to clear his mind of everything he'd learned between the ages of one and three. This is not easy to do, but since Quant had always accepted each day as an act of faith, he now had only to shift into reverse to come forth with an act of disbelief.

Now his mind felt clear.

He opened his eyes to see it was mostly he that was moving rather than the landscape.

And an interesting landscape it was, if rather unsettling.

But feeling he could perceive his surroundings, and possibly even give names to classes of things (a sort of magic way to control them), Quant lost the section of fear closest to his bowels and proceeded to concentrate on what was pulling at his ship and how to stop it.

"Ho there!" he called (what *does* one say in such a situation?).

Immediately he was stopped with a bump that almost knocked him out and looking around the ship he noticed that the landscape rushed away in a ten-foot circle around him.

"Ho there!" he called again, and the landscape retreated further, rather in the fashion of Alice Ben Bolt.

Had it been this vegetation, or whatever, dragging him along?

He walked carefully about the ship, remembering to behave as

though he were in free fall, and filing away for future cogitation the fact that the landscape was not all on the ground. It floated at various levels and the interesting cloud formations were more likely to drop ripe fruit on his head than rain.

Though of course they wouldn't drop. They'd just hang there. Which led Quant to wonder what they grew on or in, if not soil. Air-living, perhaps.

The sursurrated loudened and trembled and Quant got the definite impression he was approaching it. Whatever had been dragging him along was also making that sound.

Quant held his thumb on the button of his gun.

"Stick 'em up!" he said, coming around the curve of the ship and thinking that one thing he had never learned was how to use a gun in free fall.

- He came then upon a structure of Euclidean nicety which was simultaneously untelescoping vertically and spreading to the ground laterally. Wire-like projections hummed and trembled. Spreading slowly for about a twenty-foot square it began to sink into the ground and as the wires went down the humming stopped all at once, as though in the middle of a phrase, leaving Quant feeling as though he'd gone deaf on a dominant seventh.

Quant examined the skin of his

ship with a contraction of the intestines—other people may feel things in their hearts, but Quant was more likely to feel them lower down—for some sort of damage had been done and since it was of a subtle nature he wouldn't know enough about it to fix it. The color and texture had been changed on a spot forward of the jets. The metal was—not exactly pitted—waffled, or plaided, in a tiny pattern left inlaid with acerulian colors.

Also, when he moved back a bit to see if any other damage had been done, the ship leaned back on its tail and stuck its nose up into the air, and stayed that way.

It had acquired a bit of gravity. "Well, God - damn," Quant thought, and he got out a sandwich. Not really a sandwich, of course, but a compressed capsule which he hoped there was sufficient oxygen in the air to make into what is euphemistically referred to as a "meal."

There was, and he sat down on a convenient boulder to eat (drink) it and this required a bit of wrestling because he'd forgotten about the null-grav business.

At least, was his first thought, my ship is anchored.

And I, was his second thought, feel different and a little heavier, at least not quite so floaty—does one collect gravity here?

The air in his lungs, no doubt, leaving tiny deposits of aerial mat-

ter with its peculiar gravity. And dusts of some sort on his skin suit—though his skin suit was supposed to repel dust and light matter of all sorts. Still, light matter would not exist here, so it would be heavy matter.

He looked his skin suit over and decided it was making him itch, so he took it off. Actually what he wanted was to *feel* the planet he had been hearing and seeing.

He should have worried about himself, because two senses are enough for most people to sightsee with. One investigates with a couple of senses and a lot of instruments.

But what he was doing was not investigating. He was abandoning himself to an inconceivably alien world and not being overly intellectual, he found mere mental abandonment unsatisfying.

And he was not accustomed to abandoning himself with his clothes on.

His cigarette burned badly but he drew at it anyway and saw that the smoke changed color in the air, and that the air was inhabited, too. Not, like the planet Erx, with barely visible beings who seemed solid only as to their edges—and it was because of their edges that he was forced to observe their disgusting . . . but Quant was in no mood to contemplate the disgusting customs of the planet Erx.

The air on Chromata was gay and shapely with swarms of vege-

tation—or perhaps dust or animal matter or both or all—that undulated and danced and showed the shape of the wind. And sometimes they rose and spread and draped across the sun, and sometimes they spread across the ground in ropes or sheets and when Quant went to grab one, to discover the nature of its feel, it wrapped itself around him and tickled his nostrils and made him sneeze.

Quant laughed and looked at his watch, which was always correct and which ran on the pulse of his blood and because of his relatively calm nature and lack of disease generally was pretty close to solar time. It told him when to eat and when to replenish oxygen and when to sleep—all things an explorer must frequently do in minimal ways. It also told him approximately what time it was relative to other people, since we all keep approximately the same time.

It told him he had a couple of hours left on his oxygen, and he laughed into the wind and let the sheet-like Chromatan thing slip more tightly about him.

It was an odd feeling. Rather the way a woman must feel when she's wearing a satin drape-dress. It must slither across her skin as she moves.

Quant unwound the thing from him—it was quite heavy—and watched it sheet off in the wind.

It wafted toward the right and reached an orange sticklike projection that leaned up from the earth. And it wound around the angular body and digested it, down to the ground, so that the geometrical thing no longer existed. And the sheetlike thing changed color and divided into two and blew off in a sparkle.

Animal, Quant asked himself, vegetable, or mineral?

The really important question is, am *I* edible.

He looked at his arms and they were foreign. The hairs on his arms were inhabited with dust or parasites—not saffron, not indigo, but wrong-colored—and he couldn't help wondering if he were being absorbed. He brushed at it and it didn't come off like dust (but then this wouldn't be normal dust). It could be scraped away with the knife from his pack, but then it stuck on the knife and more collected on his body.

It didn't hurt. It just sat there.

He was getting heavier all the time, and it was much more comfortable than free fall. He liked, too, to think that he was attracting the planet, instead of the planet attracting him.

He started back for his ship, because he suddenly realized he should not have taken his eyes from it, and then he stopped.

Something was talking to him. No, *at* him. Insistently and in whispers and mutters and mur-



murs and occasionally a slightly angry emphasis, sounding like the clearing of a throat. So he stood stock still, as a child would when he can hear from the next room the murmur of conversation which is no doubt about him, but can't make out the separate words. And he tensed his lips across his teeth, which is a marvelous way to improve the hearing, and concentrated all of his energies into his ears.

It was coming through. Yes. He was beginning to under . . .

"God damn it, you're standing on my head!" it said. (It didn't actually say it in Terran words like that, of course, and it wasn't actually a head, but this is the sort of phrase that can be made comprehensible even in a foreign language. And even if the other thing isn't a language, but more an agitation of the motes of the air and a teasing of the prickle cell layer of the skin.)

Quant jumped to one side quickly, which sent him sprawling not quite to the ground (he wasn't heavy enough to have much balance yet).

The thing drew itself around into a circle and said reproachfully, "Why did you hurt me if you didn't want to eat me?"

"I didn't know you were there," Quant answered. "I'm sorry."

"That's nice for you, but it doesn't help me. You have no consciousness?"

"Of course I have consciousness. I just wasn't noticing where I was walking."

"Mutually exclusive statements," the creature stated. "Well, what's wrong with me? Why aren't you eating me?"

"Eat you!" cried Quant, regarding the set of iridescent blisters with whom he was conversing.

"I know I can't eat you because you popped two of my blebs when you stepped on my head and you were no more absorbable than dirt and now you say that you don't want to eat me. You *can't* eat me! That's what it is." The creature retreated and extended its blistered surface into a unresolvable ellipse which set Quant's teeth on edged. "You're not human!"

"*I'm* not human." But of course, Quant thought, I'm only translating what the creature is obviously trying to say into words and they can't be expected to match very well.

"The One remains," the creature quoted, or so it came out in Quant's neural response, "the many change and pass; But *you* can't change and pass."

"You mean you all eat each other and change form but retain some central consciousness so you don't really die? It sounds very comforting. You see, I've never been really satisfied by the thought that I would turn into grass and flowers when I die, because I won't *know* I'm grass and flowers. It

would make a big difference if I thought a flower knew it was a flower, and particularly if it also knew it was me. It was I, I mean."

"I don't absorb you," the creature said. "And I mean that was a double entendre. And there's something else wrong with you. You lean at odd angles. It's not just unrhythmic, it's . . . eerie."

"I'm nongravitic," Quant said. "You see, where I come from, the planet furnishes the gravity. I mean, I've got the same amount of gravity I thought all matter was supposed to have, but no more. I depend on the planet to keep me in the proper position. Whereas gravity seems to be a property of you instead of your planet."

"You're *dirt!*" the creature coughed in a sursurrated scream. "You're a great, big walking blob of dirt!"

"No, no," cried Quant, forgetting to whisper, and to his horror the creature popped all its blebs and a mournful liquid poured out into the ambient atmosphere, and it shuddered and streamed away from him.

The vegetation round about sank into the ground or slid away or floated off, each to its nature.

"I must go and warn the Others," the dying (Changing and Passing) creature hissed. "Who's hungry?" Quant heard it broadcasting. "I've got something important to be absorbed. Who's hungry?" And it blew away.

Which left Quant to clamber up his ship to the port, wondering if he were going to be attacked by the creatures of Chromata.

What I should do now, Quant thought, is I should go home, provided my ship will fly. It was odd to remember, but he really did have a home. A wife who, by now, was really a good deal older than he, because of the time he'd spent in hiberno, but whom he still loved when he was around her—partly because Quant had never sat a set of values that required women to be young, and partly because she kept having this or that plasticized and she gave fair to die young no matter how long she lived.

Yes, there was Annamarie, who was always glad to see him, and perfumed the bed when he came home, and who was also a little glad when he left, for she had arranged her life without him and while of course she loved him, it was easier and less confusing to love him at a distance and devote Sunday afternoons to writing him long letters. But if he took off now and went home she'd be very glad to see him and so would the children—no, they were no longer children—still, they'd always been fond of him and Annamarie had done such a good job they really thought he was a marvelous father, which of course he wasn't.

He had responsibilities, which were well covered by insurance.

And a responsibility to science, which he found he really didn't care about.

After all, Quant thought, entering his ship and finding it distasteful, what does science care about me? And besides, Chromata had something Arts and Sciences could speak about only in vague generalities.

Immortality.

Quant ran his tongue over his lips and came away with a taste like . . . not like anything else. Like the float of a bubble, perhaps. Or air where the wind has been.

I'm eating things and breathing things, he thought. Will I change?

But he had already changed.

The inside of the ship was the wrong shape and there was no voluptuousness in even the softest of the cushions, or the small supply of aged brandy, or the tapes of magnificent music, or any of the other few human pleasures which are small and portable.

Whereas Chromata . . .

Quant went outside again, climbed down and planked out on the ground, leaning on his elbows and watching an incredible sunset stretch up from the horizon and around the levels of life that floated in conscious peace over Chromata.

Was he sliding or were the tetragonous growths over there moving? There is no proper human organ to tell us we're moving,

which can be confusing in train stations.

It was the ground beneath him, Quant found, as his elbow slid away. It was coming alive with the sunset.

A nocturnal creature, he thought, rolling over and getting up quickly, in case he were on somebody's head again.

The ground shifted and moved about him and softened and Quant found himself wondering how deep it was.

And wondered if this indicated a strong death wish, and if so, whether it could really be counted a death wish, since Chromata held in its digestive system the juices of immortality.

The more Quant thought about it, the less patient he felt with his mortal coil. For he would like to be a glinting sheet blowing in the wind, or a collapsable lattice, or a floating cloud, or even a sluggish marsh flowing over the earth, spread for whatever moons might rise.

Quant hadn't even checked to see what moons the planet had.

Darkness rushed out at him, but it was not the night, it was the earth, or the ooze of the earth, beneath which he sank and his eyes were gone and his mouth was stopped.

It really doesn't matter, he thought. I've got my oxygen capsule and I don't need to breath. Not for a little while.

Besides that, it really didn't matter anyway.

He wasn't actually sinking. He was moving with voluptuous tides that caressed him and took him in and felt him with new senses. Something bubbly about it. He felt as water must feel when it's mixed with wine (or used to when the ancients did this with regularity.)

And the reason such a simile occurred to Quant was that he *was* mixing. Racial intermixture, he thought. Something even sexual, he thought, but he didn't think it very much because it sounded perverted. What he was having was a previously unknown emotion.

But what am I losing? he thought. Maybe myself. Maybe I won't stay myself and then it'll all be for nothing and I'll be gone like a popped balloon.

"My name is Quant Aut!" he shouted. He was holding on to it. "My name is Quant Aut!"

"So your name is Quant Aut," said the Ooze, which had begun to tremble violently at the noise. "Here out of the kindness of my heart I've got you half digested and what do you do? You throw pointed sounds at me. How do you do that, anyway?"

"With my voice," Quant whispered. "No, I guess I'm doing it some other way now, but the principle is the same. I've got pointed thoughts. I can't help it. I'm from another world."

"Ridiculous. The rumor was that you're dirt. You're not. You've got nocturnal chemistry but—God damn it, you taste terrible."

"I'm sorry. Look, you can't go off and leave me *half-digested*. You can't imagine what a mess I'd be."

"I didn't know you'd be so loathsome. Besides, it's taking too long and I find you dull."

"Please," said Quant, who wondered, sweating, how it would feel to be left out half digested—how he would look and how revolting the pain would be and how long it would take him to die, particularly if he'd lost the use of his limbs and couldn't dispatch himself quickly. "Please. Maybe you'll learn to like me. And what makes you think I'm dull? What do you like to do while you're eating?"

"I like stories," the Ooze said. "But it's too much to expect that you'll know any good stories."

"Do they have to be funny?" Quant couldn't think of a joke to save his life. And he recalled times in bars when he'd finally remembered a joke but the punch line had left him at the last minute.

"No. Life is real, life if earnest. Do you have any earnest stories?"

"Ernest and Frank," said Quant "I can tell you my life story."

The Ooze groaned.

"But this is different," said Quant hastily. "I come from another world and I've had many interesting adventures."

"Embroider a little."

"I don't need to embroider. I . . ." Quant racked his brains. "There was the planet Erx, for instance."

"O.K. for instance . . . what's that scratchy stuff?"

"My beard. I didn't depilate when I came out of hiberno but there isn't much of it. The planet Erx is invisible."

"Silly. If there's no way to perceive it then it doesn't exist."

"Wrong! It wasn't visible to ordinary Terran senses—Terra is the planet I'm from—but I don't seem to have ordinary human senses. Or more likely, my mind didn't set in ordinary Terran patterns. I used to consider it a defect, but . . ."

"I loath self-analysis. What about the planet Erx?"

"Well, the planet Erx is an enormous, very tenuous disk, like an overgrown cr. (I'm being assimilated, Quant thought. I didn't used to know what a cr was). It is so large and so attenuated that you would normally go right through it, only when I picked it up on the ship's TV—I saw it, you understand—it immediately struck me that it showed that something besides nature had been tampering with it. Not that the mind isn't part of nature but—an excessive tendency to reverse the second law of thermodynamics usually has some intelligence behind it. And so, approaching slowly and keep-

ing my mind open, I stopped at the planet Erx and wandered freely among the inhabitants."

"Indigestible?" asked the Ooze with the shudder reserved for aliens and ghouls.

"Yes. No. That is, I didn't try. They were so tenuous I could wander in and out of them. Anyway, they were not, as you might be thinking, amorphous, but very rigid in shape and in fact fitted into each other like a jigsaw puzzle. This is the way they slept or banded together in times of panic or sat and watched public spectacles—not all the inhabitants of the planet at once, you understand. They had separate patterns by family groups."

"This was their form of feeding on each other?"

"No, no. They had a repulsive custom but that wasn't it."

"What's repulsive about feeding on each other?"

Quant went to bite his tongue, and found he didn't have one. He could do it figuratively, which turned out to be fully as satisfactory, and he realized then that he was going to go through life—eternity (which is not, after all, forever)—with his homosapient habits. And ooze though he was now, undulating to double moonlight, he was also a mental structure as stiff with lines and angles as an implanted sd. I only thought I had a flexible mind, Quant decided. Or only relatively flexible.

It was an odd reverse. Quant was used to thinking of himself—when he did think of himself, which hadn't happened much until lately—as having a shaped body and an amorphous mind. And here he was with an amorphous body and a shaped mind.

Well, anyway I'm getting to know myself, he thought.

"Was it sexual?" the Ooze (the part of the ooze which Quant was not) asked. "This is how they merged to divide?"

"No, no. It was much more disgusting than that."

"You find an awful lot of things disgusting, for someone distasteful himself. I'm beginning to get bored and I've hit a pocket of little rocks. I can't manage them."

"Just let them go. That must be my fillings. It's a plastic compound of some sort. No, this jit-saw business was just a matter of custom reinforced by evolution. It happened that on the planet Erx, acquired characteristics were inherited."

"Of course."

"No. Here you acquire a whole body. I mean, when the physical individual . . ."

"Get on to the disgusting habit."

"Well, there was of course intra-familial interlocking and along with it intrafamilial mating (though the two are not to be confused.) Because of the complexity and diverseness of the pattern a place could almost always be

found for the children. But sometimes there was an odd member to whom there was no fitting, or sometimes for social or political reasons a weaker family was to be joined to a stronger one and there was no natural fitting. So in this case they . . . you are not the right shape to understand this."

"I know what it's like to be rigid," the Ooze said, gliding over a boulder and running down in a stream.

"Then, they take and bend the person so he *does* fit. You understand this entails breaking all his bones and tearing his flesh, which is just as solid to him as mine used to be to me."

"A broken sr must be absorbed immediately," the Ooze said. "Otherwise his susurrations are too horrible to bear."

"That's it. It's the ultimate in torture, but the Erxian doesn't die. He lives on and even reproduces and he is not allowed to die until there is a child big enough to occupy his position. And all this time he is in the most excruciating and ceaseless torment."

The Ooze shuddered. "The noise doesn't kill the others?"

"The others," said Quant, who found that even now it sickened him to remember it, "the others laugh at it for being a misfit. You see, it has no hope, no sympathy, no future and even its death is planned only at the convenience of others."



"Ah, the pity of it," the Ooze said. "I'm glad it isn't true, but it increases my gravity just to think of it."

"But it is true."

Quant was aware of a luminescent bubble sinking toward him, turning iridescent almost-gold in the moonlights. The bubble rolled as Quant and the ooze coated it, and carried Quant upward. He could feel his drag on it, but it shifted its gravity in some way to compensate, and he rose with the tides of the air.

"How soft the moonlights sleep on yonder banks," quoted the bubble melodiously—or this is how it came out in Quant's mind, because whatever the bubble was saying was poetry and as Quant's mind was unable to produce anything original and a literal translation would have missed the meaning completely, bits of suitable quotation had to be dredged up from high school lit.

Which set in front of Quant's mind, for no reason at all, a sudden nostalgic picture—Quant tended to think in slides rather than motion picture. A result, perhaps, of inadequate educational

aids in his first three grades—a picture of the half acres where he spent childhood summers, where the sunlight wove through two leafed branches and flowed away in gold through a tiny spring that ran down between tree roots. And he became so consumed with a need to go home again that his tongue clove to his palate and he could feel his Chromatan form shiver and contract in a rhythmic fashion.

He thought of the warmth of his wife and his clear-voiced children and even, one supposes, of God, because he said, My God, what have I done!

And the bubble, who had perhaps read his thoughts, or perhaps just happened to say it, or even perhaps was saying something entirely different, said, "What shall it profit a man, if he shall gain the whole world, and lose his own soul?"

Only Quant finally got over his mood and he decided it had profited him a good deal.

Which is a very bad moral, but then Quant was never again heard of by what we think of as the civilized world.



*By the author of THE CIRCUS OF DR. LAO, a tale of one hundred men who marched into imprisonment in a long, green valley. The imprisonment was not a usual one . . . neither was its effect. . . .*

## THE CAPTIVITY

*by Charles G. Finney*

YES, SAID ROPS, I KNOW IT sounds like the Abyssinnia of Rasselas, but there it was, and it was real. One hundred of us were there; it dawned on us later that we had been selected. *They* held about six thousand of us as captives, you know. So *they* picked this Hundred, and all the rest were allowed to escape. It wasn't much they could escape to. Everything—nearly everything—was in ruins. But the escapees and the ones who were still alive in the cities and the villages they escaped to managed to rebuild, to survive. Probably that was the purpose in letting them escape.

Of course, why we Hundred were kept in captivity is something I'll never know. That was forty years ago, but things haven't changed a bit. We're all ready to go at it again—bang, bang, bang! The winners of the one forty years ago have become weakened,

and the losers have become strong. There seems to be some sort of law which governs these things, but I don't know what it is.

But the winners that time had been plenty strong, strong enough, I suppose, to have imposed their will on the whole world. A sort of compromise ended the fighting, but there was no question about who the victors were. There does seem to be a question now about who will win this next one; all sides are prepared about equally; the only way to settle it is to fight it out.

This Hundred I was in was captured in the Far North Region; *they* flew us out the next day—after *they* had culled us over—to the place which was to be our prison camp for the next three years. You have seen the green-covered hills rising in Hawaii and the green-covered chasms in Mindanae. It was a place like

that. There was a canyon all covered with green about ten miles long, flat at the bottom, traversed by a river. The canyon was about a mile wide at the bottom, and probably fifteen miles across from rim to rim. The sides of the canyon were benched and terraced. The whole thing was fenced in, as is a wildlife section in a zoo; the animals seem to be living in their natural habitat, but everybody—even the animals—knows there's a fence around it and that there's no escape.

There were trails and pathways along the benches and terraces, and there were big roomy caves carved in the canyon walls. The Hundred was broken up into Tens, and each of the Tens was given a cave to use as barracks. Toilet facilities were provided in the caves, and each man had sleeping privacy for his hammock was screened off. *They* took away our Far North Region uniforms and gave us flower-print loin cloths to wear. *They* immunized us against all possibility of sickness. I never knew any of the Hundred to become ill during the three years we were there. There was never a death, either. The Hundred that marched in all marched out again three years later.

Never once did we see our actual captors. *Their* word was passed down to us through an intermediate race, military men

who acted as our jailers. Perhaps attendants would be a better word than jailers. In no sense were we in a jail. We were in a little ten-mile-long world of our own, but it wasn't like a jail at all. We were nurtured, cared for, looked after as if we were the rarest of rare animals. And it was a beautiful world of river and hills and flowers and fruits and sunny greenery.

We played at sports much of the time, a game of balls on a sanded court being the most favored contest. Twenty men could play at a time, one Ten against a rival Ten. We drew up a schedule and held a tournament; the Ten I was in became the world champions one year, but lost the next. We used to seine in the river, ten men manning the big nets *they* had given us. This was as much a sport as anything else. The prize for the seiners who netted the most fish was an extra little pipe of wine. We hunted, with knives made of flint, the deer and pigs that lived high up on the green benches, and this was the best sport of all. The meat thus secured, the white meat of fish, the pale meat of pig, and the red meat of deer, we turned over to the intermediates who attended us, and the meat was cooked for us and served to us.

The arts were encouraged. I myself took up painting, for I had always wanted to paint. *They* provided me with pigments,

brushes, and lovely thin boards of hard white wood to paint on. When I asked for it, through the intermediates, *they* provided me with a book of instructions on how the proper shading was done to delineate the eyes and muscles and breasts of the nude figure.

Many of the men wished to pursue sculptoring and modeling and ceramy. *They* provided these men with the tools needed. Seven men from one of the Tens down the canyon erected a scaffolding against a bare rock wall and chiseled into the wall heroic-size statues of themselves standing there in different postures. They won the prize that year for art. One of my paintings was singled out for honorable mention. It was a nude I had done of Leaf. She had just caught a salamander, and in my painting she stands holding it with a look of fright on her face, and drops of water glisten on her skin. Oh, yes, *they* provided us with women. *They* considered women as necessary to our well-being as food and exercise and wine and shelter. We named the girls after the pretty things around us. Thus I called mine Leaf and another man in our Ten named his Twig and another named his Petal. They were girls from another race, captive, too, of course, with skins lighter than ours. I remember how delighted the Hundred was when it learned, on the third day of the captivity,

that there would be girls. We had a long frolic the night the girls arrived. We built a great fire on the sand that bordered the river, and *they* provided us with extra wine. The girls were given their own caves. We could visit them whenever we chose, visit whichever one we chose, provided she gave us entry.

We mated, in fact, as birds mate—for the week, for the month, for the season. One of the men of a Ten near ours sired eleven children during his three years of captivity.

Like hippos in a zoo, you know: the keepers give them the best care possible, and are happy when they breed. Or like pigs, perhaps. You have seen the feeding arrangements on pork farms. There will be so many troughs for so many pigs, and the pigs quickly learn to gather at the troughs at the stated feeding times. Of course, we were not fed at troughs; we were given our food in black and brown stoneware bowls. Each Ten had its own feeding place, garitas we called them after their similarity to sentry boxes. They were gate-like places, ten of them, in the fence at the mouth of our canyon. It was just a wire mesh fence, but it was very high; the lianas had crawled all over it, concealing its steel meshes and making it look like an impenetrable barricade of green. Five stated times a day we of the

Tens would gather at our own garitas and be served. Here is a typical menu, though the menu changed daily, and remember that the servings were quite small:

Breakfast: Fruit, cereal, egg, coffee.

First Lunch: One little sausage, roll, pickle.

Second Lunch: Soup (lentil or bean or pea), roll, tart, wine (red, one cup.)

Dinner: Meat or fish or fowl, raw vegetable salad, wine (white, one cup.)

Third Lunch (in the evening): Broth, three large olives, roll, beer (one large flagon.)

Our daily schedule, though it varied every day, was something like this:

Breakfast, then hunting in the hills or seining in the river.

First lunch, then group games where the Tens would vie against each other.

Second lunch, then a rest period which was usually devoted to art (sculptoring, painting, wood carving, etc.)

Dinner, eaten together with the girls.

Third lunch, very late in the evening. We would be tired then and the girls would drift away up the canyon to their own caves.

Now, none of this was hard and fast. We could follow the daily schedule or disregard it. We could eat at the stated times, or we could miss the meals. We could spend the whole day sleeping, or playing with the girls, just as we chose. We could hunt the whole day or work the whole day on our art projects. There was no discipline, and there were no roll calls or inspections. But mostly we followed the routine. We referred to it as "the rut."

I found it necessary, after I had been there about fifteen months, to take long, solitary walks, which I usually did after Second Lunch. The canyon terraces and benches were laced with paths, little trailways under a constant canopy of green, moist little trailways full of bird sounds and fern odors and shadows. Even in all the three years I was there, I was never able to explore all the paths.

Once I followed one which led upward rather sharply, almost like stair steps, and then leveled off into a glade where there was an opening in the roof of greenery. In the glade was a mountain hillside pool fed by a waterfall which plunged over a cliff formed by the bench above, the water frothing down through waving, spumid ferns. In the pool three of the girls, Twig, Nest and Vine, were playing, and they had three men with them. None wore any-

thing, for they were playing in the water; the young men had long beards, for they had not shaved for nearly two years. A radiant fruit grew on vines near the pool; they were eating of it and throwing the seeds at each other. Lotos Land. On the hills like gods reclined. I hurried back to my cave and gathered up my painting things, and I coaxed Twig and Nest and Vine and the three youths to arrange themselves in a frieze there by the waterfall. And thus it was that I painted them, and I think I am the only man ever to have painted nymphs and satyrs in the flesh.

Another time I took another path. As always, it was a green path, moist and full of bird sounds and the odor of ferns. It led to a place which, because of the enormity of the trees which grew there and the spacing of their trunks, seemed like the interior of a cathedral. And there was a youth there from one of the other Tens. He had made a kind of table of green branches, and when I came upon him he was standing before it, and I heard him say, "I shall go up to the altar of God, to God the joy of my youth." Then he saw me and he giggled. He giggled only a little, then began to weep. "I have taken the name of the Lord in vain. I have sinned," he said. He fled from there. I never saw him again.

We had no Sundays. Every day

was like another day. We never knew which day it was, but used to spend much time in aimless arguments over whether it was Monday or Thursday.

It was during one of those solitary walks toward the end of the second year that I came upon a man from one of the upper Tens. He had his girl with him. She was very beautiful. Neither wore anything, for by then all of us, men and girls alike, had given up clothing as a nuisance. He seemed to want to talk, so I stopped beside him. He was an older man, probably twenty-two or twenty-three.

"See these little roots," he said, indicating a cluster of them which thrust out from a crack in the cliff wall. "They look like tiny electric wires, don't they? I used to have a job with a telephone company, working with such wires. Each wire was a different color; the job was to match color to color and so complete the splicing accurately. It was a very tedious job and did not pay too much. But, you know, when it was done, and done properly, there was a satisfaction in it. A feeling that something had been accomplished."

"Well," I said, "I suppose you could do something of the sort here. You have only to let *them* know, and *they'll* provide you with wires and things."

"Here?" he cried. "Let *them*



know? I'd cut my throat first." And he took the cigarette from my fingers and burnt his girl savagely with it on her shoulder.

During the third year, another man and myself decided to escape. We had examined the fence at the garita where we were fed and had discovered that its meshes were no more formidable than chicken wire. So our plan was simple enough. We would merely climb to the rim of the canyon where we assumed the fence stood and, with clubs made from dead tree limbs, batter our way through it. The reason we had never attempted to escape before was because up to that point we had rather enjoyed our captivity.

We started out after Second Lunch and after an hour's climbing had gotten up about five thousand feet, for the path we took was terribly steep. As we ascended the higher benches other paths crossed ours again and again, and on these paths there was a deer hunt in full cry, a hunt which started at the usual time after Breakfast but which because of the superb stamina of the particular deer being hunted had gone on far longer than the ordinary chase.

There in our canyon we hunted deer as the Tarahumara Indians of the barrancas of the Sierra Madre Occidental hunted them: We ran them down and cut their

throats. On a hunting party we stationed ourselves at intervals along the terraces where the deer were found and whoever first started a deer would give a cry and take up the chase, and he would bound after the deer until he became winded. Then another of us, or two or three of us, would take up the chase in his stead, ever bounding, ever on the deer's trail. The animal was never allowed to stop and rest, never allowed to stop and graze, never allowed to pause and drink, for once the chase was taken up it never halted until the deer was dead. And the deer itself would never halt until its lungs were full of blood and its hooves were torn and splintered from endless clawing and pounding over the rocks of the trails. The deer only halted and fell when it could run no longer, and when the deer fell the deadly relay was done.

So, as my companion and I climbed up the side of the canyon, we could hear the noise of the chase, the pounding of the deer's hooves, the cries of its pursuers. And from far down in the canyon from the ball courts along the river we could hear the shouts of the players as one Ten vied against another Ten in other of their interminable games. Then at times the noise of the chase would fade away as quarry and hunters swept far up the canyon on some curving path, and the shouts from the

playing courts would die out after a score was made, and then all we could hear would be the bird sounds in the canyon's greenery and the sounds of the great ferns as the wind stirred them.

By afternoon we thought we should have reached the canyon's finite rim where we assumed the fence would be, but the benches and terraces still reared above us. The chase continued on the paths and trails around us; we wondered how one deer could hold out so long against that pack of human wolves.

And then we did reach the rim of the canyon, and we looked down, and the canyon was a long winding slash of green with a thin white streak through its center—the river and its sanded sides. We also found the fence. It was not formidable at all; it was neither very high nor very strong. There was no point in making clubs and battering a hole in it, for the fence had a gate in it and the gate was unlocked.

As we examined the gate the sound of the chase arose again; it was coming toward us along a path that bordered the inner side of the fence. We were so high now that we could no longer hear the sounds of the players down on the sands. My companion and I looked at each other, and we nodded in agreement. We opened the gate of the fence and when the deer came bounding along the

trail we leaped in front of him and startled him, and with a bound he went through the gate to freedom. He was a great, gray stag, the biggest we had ever seen; his sides were heaving, and his horns were streaming with fronds of fern.

We closed the gate and went down the trail and halted the three young men who, with flint knives in their hands, had been pursuing him. We told them what we had done. "So there's a gate up there?" one of them said. "Could we all go through it—like the big buck did?" "Certainly," we said. "But what's on the other side?" he asked. "Nothing," we said. "Just more greenery, more mountains. It's better on this side." So they threw away their knives and joined my companion and me as we began our descent into the canyon.

During the third year animosities arose; fighting between the Tens and the individuals of the Tens was monotonously frequent. But, although there was no ordinance against it, none of us killed another. "Thou shalt not murder" was the only law we obeyed, but none of us could explain why we did so. Certainly *they* had never so ordered us; *they* never gave us any orders in any form at all. But as a troop of monkeys in trees operates without formal rules or laws to guide it, yet, nevertheless, observes certain taboos, so did we.

There were many flare-ups over many things: scoring on the playing field, minor pilferings, suspected insults; and there were many, many fights over the girls, some of whom were prettier than the others. But none of the fights ever ended in murder. There seemed to be some agreement among us that One Hundred had marched into imprisonment and One Hundred would some day march out. So we beat and clawed and cursed each other, and sometimes we cut each other with flint knives, but never did we kill each other. I think that was our only pride.

For we could take no pride in anything else. When we had marched in we were civilized; at least we had the veneer of civilization. There were certain things we would do and certain things

we would not do. We obediently wore the loin cloths *they* had given us. We obediently said our prayers at night. But with no discipline over us, with no restrictions upon us, with no necessity for doing anything, with no animal desire left unfulfilled, we became as animals. We threw away our loin cloths and stopped saying our prayers.

You might say there was a price attached to all this. And there was. Our captivity ended exactly on the hour when the three years were up. One hundred men had marched into it; one hundred men marched out. We had marched in as one group, but we marched out as two. The first fifty of us to march out were those who had somehow survived. The second fifty were those who had gone mad.



*As has been pointed out by many authorities, cultural exchange is the real key to world peace. As Miss Smith here points out, however, the appointment of ambassadors and their staffs on the grounds of their artistic capacities alone will not solve all problems for everybody. . . .*

## ROBERT E. LEE AT MOSCOW

*by Evelyn E. Smith*

THE STately CORRIDORS OF the American Embassy in Moscow were filled with joyous song, as the Foreign Service officers, singly and in chorus, rehearsed their roles for the next evening's performance. The only one who was actually working at the routine details of his office, rather than practicing scales or painting scenery, was Griffith Herriot Harrington III—or, rather, the youth who passed by that name, for he was an imposter. He sat disconsolately in his office, issuing a visa.

"Thank God, I am finding you, comrade," Said the aged Muscovite lady whose passport was being serviced. "All through embassy am I wandering, looking for some kindly diplomat who will stamping my passport, so I can going to visit my son in United States of America. And everywhere is much singing and no stamping. . . . But

what is with you, little one?"

For a large tear slid slowly down one side of the young diplomat's nose. "Pray do not call me little one, madam," he said—stiffly, to conceal his dismay at this outrageous lapse from self-control. "I am considered to be above the average in height."

Which, indeed, he was, being six feet, four inches tall, and of the approximate width of a stringbean. He would never, his mother had sighed in her frequent futile reviews of his meagre capacities, qualify for government service on beauty alone—like President House, for instance.

Of course she spoke out of prejudice. It was a common Republican allegation that President Charles Lowell House had won, not only the Presidency, but also the popularity on stage and screen that had qualified him for that office, be-

cause of his pulchritude rather than any outstanding dramatic talent. This charge, Democrats had retorted, was absurd, as anyone who had watched President House deliver one of his dramatic monologues before Congress or a television audience could see—unless blindly prejudiced. Which, of course, Mrs. Harrington was and always had been, since her family (she and her husband and cousins) had been Republican from way, way back, even before the time that culture had infiltrated politics, and the common man had fallen by the wayside. . . .

Young Harrington pulled himself out of reverie to find that his client was saying apologetically, "I do not mean to suggesting you are low-sized or even that you are looking extremely young. . . ."

But that's what she thought, he knew, well aware that beneath the bristling moustache, his face was almost flagrantly juvenile. "I am merely employing traditional Russian diminutive," she continued, holding a motherly beam in check, "which, alas, is losing much in translation. But why is it that you are sad, little pigeon? Is it that you grieve because you have no song to sing tomorrow night?"

"I could hardly expect to be given a role in the opera, madam," he said coldly, "as it is obvious that I have no voice."

It might have been better, he had often thought, in his inces-

sant moments of introspection if he had had no voice in literal fact. For the shrill squeak that emerged whenever he opened his mouth made him feel self-conscious—especially in this embassy, where every other officer was a veritable nightingale.

"Ah, well, a voice is not everything," she said reassuringly. "To dancing in the ballet, like the beloved members of our presidium—now that is even more good. Never am I seeing anyone execute a pirouette with more verve, more *iskustro*, more *schmaltz*, than our cultured Marshal Kruzhitnik, may his *entrechats* increase—"

"I do not dance either, madam," the pseudo-Griffith interrupted. If this bothersome old person did not stop persecuting him, he would burst into outright tears. Which, although it might not be considered out of the way for a Russian career officer, would spell disaster for a member of one of the stiff-upper-lip foreign service. French diplomats might relieve their feelings by an occasional sob; Italian diplomats thought nothing of bursting into loud screams; even British diplomats could brush away a silent tear on great or state occasions—but American diplomats didn't cry.

"Then what is your talent, little cultured comrade? . . . Ah," she sighed, as he opened his mouth to equivocate, "to have talent—it is wonderful thing. My family once

had great diplomatic tradition—ministers, ambassadors, saboteurs—not one of the Lgoonskis would have considered entering another profession. We were so cultured, so talented. . . .”

Taking out a large handkerchief of fine linen, embroidered with a coat of arms showing a tractor rampant upon a field vert, she blew her nose.

“What befell them, then?” the young man inquired, glad of the diversion from the original topic.

“My husband and I, alas, are having only one son and he—” she sobbed—“is having no talent, no talent at all. He is not dancing; he is not singing; he is not painting pictures; he is not planning regions; he is not decorating interiors; he—”

“I know,” young Harrington interrupted. “Oh, how well I know!”

“You are not knowing,” the old lady said huffily. “You are too young to have suffered. Besides, you are an American, and everybody is knowing that Americans cannot suffer like Russians can. Nobody can suffer like a Russian can.”

*Hal* the young man thought ironically. *Little does she know the Dostoyevskian depths my soul is plumbing at this very moment.*

But he said nothing, and, after dabbing at her eyes, the old lady went on brokenly, “So, my son is emigrating to America to become peasant. Is better to be peasant in

America, where, at least, it is not required to be wearing embroidered blouses.”

“There are worse things than being a peasant,” young Harrington sighed, his voice breaking also. His family too had had a long diplomatic tradition—which had been besmirched once and was in a fair way to be broken now. If only an embroidered blouse would solve the problem, how glad he would be to don one. *The land*, he thought, *now there's an idea. Working with the soil—making green things grow—now isn't that creative?* Perhaps that is my aptitude. That afternoon he would go out and buy a flowerpot and some seeds. . . .

“And your talent, young sir?” the old pest asked. After he had almost begun to think she had sidetracked herself. Still, it was a legitimate question, for every diplomat had to have some talent, and, for the higher echelons and more important embassies, genius. Mere competence got you nowhere in these enlightened days.

“I am—” he choked on the lie—“a poet.”

“Ah, a poet.” She nodded approvingly. “Poetry is good, too. Very cultural. Pushkin wrote poetry. So did Lermontov. So did—”

“Yes,” he broke in, “and very fine poetry, too.”

Though, to tell the truth, he had barely heard of either. It was not that he was poetically xenophobic;

it was that he wasn't a poet at all. He was a fraud. He was nothing. How it had hurt to have to turn aside all requests for collaboration on the libretto with the excuse that he was not a songwriter! And, when he'd been asked to write a dedicatory poem entitled "Three Cheers for the Blue and the Gray," to be read before the overture, he had replied curtly that he was a poet, not a writer of occasional verse.

True, that was precisely what the real Griffith Herriot Harrington III would have said, for he was rude to everyone except his mother, but Oliver—for that was this youth's name—did not have even enough of the creative talent to carry off discourtesy. Effective rudeness was an integral part of real artistry, and he was not an artist in any sense of the word.

From that time on, he had been distinctly *persona non grata* at the embassy. No one ever spoke to him, except to ask where he had put the extra passports. Ambassador Rainey, after staring at him coldly, had been heard to remark, "Oh, if only politics could be kept out of diplomacy, we would not be saddled with such nincompoops!" After which Oliver had been given all the really nasty tasks that no one else at the embassy wanted to do—issuing visas, scrubbing floors, and welcoming itinerant congressional committees.

For some time after the Rus-

sian lady had left, showering non-denominational blessings upon him, Oliver sat brooding at his desk, trying not to hear the powerful basso of Ambassador Rainey, as it reverberated through the air-conditioning ducts of the embassy with the pulse-stirring "At the Battle of Antietam, the Yanks we almost beat 'em . . ." The air-conditioning system conducted and amplified sound so vigorously as to give substance to the rumor that it incorporated a spy system that had somehow gone wrong.

The season before, the entire presidium of the USSR had performed the classical American Ballet *Rodeo*, as a tribute to the United States. However, in order not to offend the neutral nations, the Russian officials had substituted Cossacks for cowpunchers, and the heroine—performed with considerable dash by Mme. Bistranoganoff, secretary of the Communist Party (and the celebrity after which sausage à la Bistranoganoff had, of course, received its name)—a land girl. The result had been a smash success. Those Bolsheviks, the Americans had had to admit, really knew how to shake a leg.

Not to be outdone, the American Embassy to Moscow was presenting an equally parochial version of *Boris Godunoff*, with the locale changed to America, the time to the Civil War, and the title to *Lee at Appomattox*. The

music was also syncopated slightly to give it that distinctive American flavor. It was expected to be the diplomatic sensation of the season . . . and Oliver Hamilton Harrington had no part in it. He had failed his country.

Not that his country was materially damaged by his nonparticipation. On the contrary, he could have contributed nothing to the opera but disaster. However, he felt guilty nonetheless, for Oliver Hamilton Harrington had never been destined for the diplomatic services, and it was only fate, in the person of his mother—who had always resembled one of the more implacable Greek goddesses—that had placed him there.

If it hadn't been for Griffith Herriot Harrington II, his father, all this need never have happened. Griffith Herriot Harrington II had been a poet of such eminence that he had quickly risen in the diplomatic service, having been appointed ambassador to Rome before he was thirty. At Rome, he had acquitted himself with distinction for several years—until he had overreached himself by reading aloud, at a *conversazione* arranged by the Italian cabinet in honor of the officials of the United States Embassy, a set of original Latin verses. The Italian foreign minister, himself a historical preserver and classical scholar of considerable ability, had politely pointed out six false quantities.

Two choices were open to Griffith Herriot Harrington II. He could go back to the United States in disgrace, or he could take the honorable way out. He chose the latter, and his ashes were shipped back to the United States in a handsome Etruscan urn—the gift of the Italian government. Accompanying the urn were his pregnant widow and his little son, Griffith Herriot Harrington III, who was just turned ten.

For the next decade and a half, the boy and his posthumously-born brother, Oliver Hamilton Harrington, lived with their mother on the outskirts of Washington, existing in genteel poverty on the small pension granted her by the government, eked out by canapes from the larger diplomatic receptions—for Mrs. Harrington no longer was asked to the really exclusive affairs.

From earliest youth, young Griffith had shown great promise as a poet, and an equally great disinclination for the diplomatic service. "But consider this, Griffith," his mother had kept telling him ever since little Oliver could remember, and he had total recall, "what other career is open to the creative artist than the government? What else can he expect to do? What publishing firm would put out the works of a poet who held no civil-service rank—except, perhaps in a soft-cover edition?"



"In the old days—"

"In the old days, poets starved!" Mrs. Harrington had snapped. "Think of your family, Griffith," she had urged in softer tones. "The Harringtons have always been poets, always diplomats."

"Great-great-great grandfather Harrington was Ambassador to Togoland," Griffith had pointed out, "and he could neither read nor write, let alone be a poet. He had to put his x on passports."

"He had the soul of a poet," Mrs. Harrington had snarled. "Besides, he occupied that post in your vaunted old days. You should thank your stars that you are living in the new ones, when a culturally-oriented government appreciates talent and subsidizes genius. To think that, in the past, practicing artists had to struggle along as free-lances, or even teachers, many suffering in the process. One shudders to think of it."

But Griffith Herriot Harrington III had refused to shudder. "Suffering purifies and ennobles, Mama," he had replied, being romantic, as befitted a poet. He was also stubborn, and he refused to be psychoanalyzed, although it should have been as obvious to him as everyone else that his hatred of government service stemmed from his subconscious, and was very likely the result of some unhappy childhood experience.

For Mrs. Harrington was fundamentally right, of course, ill-chosen

though her words had been. Now that culture had come into its own, entering government service was the be-all, and end-all of the intelligentsia's desires, instead of being considered, as it had been during the twentieth century, rather unchic, if not downright vulgar.

It was the passage of the International Cultural Exchange and Trade Fair Participation Act of 1956 that had, not overnight but gradually, plunged the world into a Re-renaissance—only more so—with the difference that the part played by such noble families as the Medicis and the Borgias was now very adequately filled by the governments of the various countries. The "permissive" features of the bill had resulted in such a vast expansion of the original program as to cause a drastic change in political and social criteria as a whole. No longer were administrative ability, self-assurance, and powerful friends enough to get a man (or woman) into high office. He needed to have some talent of a creative nature besides—or, at least, powerful relatives—to qualify him for the post.

Major talents—artists, sculptors, symphonic composers, and such—generally still looked to the diplomatic service, where they had first received the recognition they had always known should be their due, or the highest federal positions. Those with lesser talents—tap dancers, jugglers, comedians—

became junior senators, members of the House of Representatives, or assemblymen. Tea tasters, flutists, flower arrangers, and those of that ilk found places befitting their talents as county sheriffs, aldermen, and park commissioners. All the rest—that vast majority who could not make the cultural grade—took their place in that huge array of citizens whose humble endeavors kept the mighty drum of the republic beating—doctors, butchers, bankers, garbage men, attorneys, chocolate dippers, teachers, and so on . . . those squalid unsung heroes without whom society could not conveniently exist.

And it was a teacher that young, idealistic Griffith, to his mother's consternation, had decided to become, for the cultural unions no longer permitted the free-lance artistry he would otherwise have chosen. Upon finishing college, he applied for a fellowship at Harvard, which for some time persisted in regarding him as another poet of the same name; it was simply unable to believe that it had been lucky enough to bag the genuine article. For the cognoscenti (with whom Harvard, as it had been from time immemorial, was full) knew that young Griffith was a fine poet, even greater, perhaps, than his father.

Matters might have rested there and the fine old house of Harrington faded into obscurity, had not the news of young Harrington's

fate come to the ears of the president. It happened to be an election year, and he wished to make a cultural yet noncommittal gesture toward the opposition. So, not understanding that the young man's failure to enter the diplomatic service derived from lack of volition rather than lack of genius—rather, *refusing* to understand, for the Secretary of Verse surely must have told him—he appointed Griffith a clerk at the American Embassy in Moscow. There, since the specialty for the last few decades had been music, any poetic shortcomings on the boy's part ought not to be obvious.

"Griffith," Mrs. Harrington had declared, on taking the message from the robopigeon, for she monitored all communication within the household—"you must accept the post. No matter how base the motives that prompted the offer, you must redeem the family honor."

There was no way for Griffith to refuse. One didn't do that sort of thing. Had he tried, even his colleagues at Harvard would have thought him mad, and, although a mild degree of insanity did not disqualify a man from teaching, it certainly stood in the way of his getting a full professorship. Once he became a professor, of course, it would be another matter. Tradition would then classify whatever might be called insanity in an instructor as mere eccentricity on the part of a professor.

Most important, Griffith, for all his outspokenness, was afraid of his mother. And she stood over him, dictating his letter of acceptance, kindly spelling out the words with which she thought he might have difficulty.

His rocket passage was all booked, his frock coat and fur cap were all packed when, at the last moment, Griffith locked himself into his room and called through the door that he was not going to come out until he had finished an epic poem with which a muse had just seized him. This would, he warned his mother, take at least three years to complete, so they need not expect him in Moscow until then. If they were in a hurry, he added, they'd better get someone else.

"Oliver," Mrs. Harrington had said, tears tempering the chilled steel of her eyes, "we are lost. Unless—" and then she looked at her younger son with dawning hope—"I have it! *You* will save us!"

And she embraced him, which she did not often do, for he was the ugly ducking of the family, being utterly devoid of talent. It had been planned to apprentice him to some respectable craft when he was older—probably the law, as the family could throw considerable business his way. The Harringtons were always suing somebody.

"But how can I, Mama?" Oliver had piped sadly. "What can I do? As you have so often said to me, I

am quite stupid and utterly without personal charm—"

"Be still," Mrs. Harrington had commanded. "You will take Griffith's place!"

"Me, Mama!" Oliver had squeaked. "But I could not write a line of verse to save my life. Besides, I am only fourteen."

"No matter, you are tall for your age. And, if you grow a moustache—"

"But, Mama, I—"

"—or paste on a moustache," she went on impatiently, "you will look older, and very like the photographs of Griffith, if he had a moustache."

"But, Mama, suppose they ask me to write a poem!"

"A great poet like Griffith cannot be expected to write verse at the drop of a gibus. You must make do!"

"But. Mama—"

"You will do as I tell you, Oliver!" she had said firmly. "It is our only chance. If you are found out, it does not much matter as Griffith's predicament could not be worse. And *your* reputation does not count."

"Yes, Mama," he had given in meekly.

And so, little (chronologically speaking) Oliver Hamilton Harrington, equipped with his brother's cunningly matched luggage his thesaurus and his rhyming dictionary (to add verisimilitude to the imposture), and a burden of

guilt too great for his tender years had set out alone on his mission to Moscow. There, for nearly a year, he had served the United States Foreign Service with uncommon inadequacy. That was, of course, as regarded his primary or cultural duties. As for routine matters, he did well enough. Having an ear, he soon learned to speak Russian perfectly. He had patience and a flair for detail, and he got on extremely well with the natives, even those to whom he was forced to refuse visas—but of what value were such pedestrian accomplishments, he told himself mournfully, to a diplomat!

Now, opening the door to his office, he saw no more applicants for visas waiting in the corridor. Since, that very morning, he had polished the floors to a stellar brilliancy, his day's work was done. For the others—the creative, the accepted ones—rehearsals would extend far into the night.

"... Sharpsburg they took her," Ambassador Rainey's powerful voice bellowed through the halls, as Oliver trudged upstairs, feeling unworthy of the lift, "whilst we stood off Hooker. . . ." Properly speaking, "The Battle of Antietam" (as suggested by "The Seige of Katan") belonged to the role of Stonewall Jackson (Varlaam), but the ambassador had taken a fancy to it, and there was nothing Stonewall, the First Secretary, could do but grind his teeth

and plan long letters to the *Times* in his dreams.

Upstairs, in his little garret, Oliver removed his moustache and peered anxiously into the watery depths of the mirror that hung over the lop-sided dressing table. No, the prickling beneath had been neither imagination nor nerves—a slight full, which would have been almost imperceptible to the eye of one to whom that patch of skin was not dear and familiar—darkened his upper lip. Soon, at least, his moustache would be real, even if everything else about him was false, false, false! Soon he would be a man in body as well as responsibility.

But of what avail was that, when he could not be his own man? What, he wondered, suddenly able to give mature consideration to the subject, did his mother mean for him to do: pose as Grif-fith for another three years, until the epic (if any, he thought with new-born adult cynicism) was finished? Or would he have to go on living a lie for the rest of his unnatural life? Oliver pressed his throbbing forehead against the cold greenish glass of the window and looked out at the falling snow and wished he were dead.

The ambassador's voice rose through the air-conditioning ducts, loud, strong, inescapable: "Leaning against a porch pillar, McClellan sipped his sarspa—"

And broke off in a loud squawk.

Probably the ambassador had received an urgent dispatch or seen a mouse, Oliver thought dully. There was always so much going on in the embassy. . . .

Downstairs, he heard the pounding of many feet, the babble of excited voices, and several short screams. *Perhaps it is another revolution, he thought, but we are on American soil; it will not affect us, except perhaps to postpone an opera opening until a new government has been established.*

It was only when he took his place at dinner, not only below the salt but underneath it—for the large size of the embassy staff had necessitated two-tier dining arrangements—that he discovered the trouble was something far more cataclysmic than a mere foreign revolution. In the middle of practicing "The Battle of Antietam," Ambassador Rainey had been stricken by laryngitis. He had lost his voice.

He had no understudy, for there was no basso in the embassy capable of sustaining the difficult role of General Robert E. Lee. The officers playing Meade (Lovitzki) and Sheridan (Tcherniakovski) were good bassos, but not great. As for the First Secretary, he was more the nephew of a previous president than a really good singer—although not incompetent; even the spoils system would not tolerate a Foreign Service officer totally without accomplishment.

In fact, there was no other basis in the United States deemed capable of handling the role on an international level, save Clyde Wappinger, Governor of the State of New York. Of course, Wappinger could hardly be familiar with the new libretto and would probably have to sing Boris's words to Robert E. Lee's costume. However, since his Russian was so poor and his enunciation imperfect in any language, Moscow would never know the difference. A robo-pigeon was dispatched with a message asking him to rocket over forthwith to save the situation and the embassy, if not the ambassador.

It was then that the hardest blow fell. Wappinger's answer was no! The opening night of the American Embassy in Moscow coincided with the opening night of the Metropolitan Opera in New York. And Governor Wappinger was scheduled to open the season as *Don Giovanni*, with all new costumes. "I am sorry," his message to the embassy read, "I love my country but my state comes first."

*If my country had thought anything of me, anyone could read between the lines, it would not have elected Charles Lowell House president at the last election.* For Governor Wappinger had been the unsuccessful Republican candidate, ascribing his loss to the fact that he did not photograph

well. Which was, indeed, the fact. He did not photograph well because he had an ugly face. He was also not a sportsman, as was amply evident now.

Curiously enough, the general air of wretchedness that pervaded the embassy that evening lifted Oliver's spirits. With the entire embassy facing ruin, even the discovery of his imposture, he thought almost gaily, would evoke, at most, a hollow groan. Soon to be scorned themselves, the officers of the embassy could hardly point the finger of scorn at him. He was so overcome with gladness, he had to take care to hide his feelings from his confreres. Although there had not been a lynching on American soil for over a century, a historical revival was not an impossibility.

It was decided to wait until morning before announcing the cancellation of the opera. Perhaps, in the interim, the ambassador might recover his voice. But the next morning, as Oliver sprang from his narrow cot, the air-conditioning ducts were silent, save for the sound of broken sobbing throughout the embassy.

Never had Oliver felt so sprightly, and, as he examined his budding moustache—three more hairs seemed to have sprouted all overnight—he felt impelled to burst into song. It was the first time such a desire had seized him since he came to Moscow, although he had been a notable bathtub per-

former at home. "My men stood firm and would not turn aside," he carolled, for "The Battle of Antietam" could not help but impress itself upon his young mind, so often had he heard it. "Thus we gave pause to General Burnside. . . ."

And he stopped as short as Ambassador Rainey had, the evening before, though the reason for his halt was diametrically opposite. Ambassador Rainey had lost a voice; Oliver Hamilton Harrington had found one. For the sound that rose up from his narrow chest and burst forth from his swelling throat was no longer the piping soprano that had afflicted him so grievously. It was a full-throated, resonant basso that filled every corner of the tiny apartment with its golden tones, and, borne on the wings of the air-conditioning system soared throughout the embassy where, one by one, the sorrowing officers of the United States Foreign Service lifted their heads first in incredulity and then in hope.

"Today," Oliver whispered, staring into the mirror where, by some trick of the light, his moustache seemed to have assumed almost luxuriant proportions, "not yesterday but today—my voice has changed—today I am a man."

The rest, of course, is history. How Oliver Hamilton Harrington, thoroughly familiar with the role of Robert E. Lee, because of the

Ambassador's overzealous practicing (which may, indeed, have led to the loss of his voice) went on that night as the lead in *Lee at Appomatox* and scored a greater success than any mere Boris had ever enjoyed. How the entire presidium of the USSR had kissed him on both cheeks and awarded him the order of the Sova-Seepoocha, the Order of the Koshatchya Moozika, and the Order of the Kreek, in rapid succession.

How, after Ambassador Rainey's resignation, Oliver Hamilton Harrington, in *propria persona*, was appointed the new ambassador to Moscow—the first United States Ambassador to any major country who had not yet attained the age of sixteen. How his hitherto sneered at idiosyncracies became all the diplomatic vogue and his endearing little habit of trying to make friends with the natives was copied in United States embassies all over the world, thus setting a totally new fashion in American diplomacy. How Griffith had been released from his fears and his room and, in grateful acknowledgement, finished his epic (which, having been originally an

excuse, had become an actuality; he had become bored and started writing it) as the libretto to the opera *Harrington at Moscow*, with which his brother opened the next season, to loud acclaim. The work immediately became part of the standard repertory in all the leading opera houses, eventually outranking both *Boris Godunoff* and *Lee at Appomatox* in popularity.

"I always knew Oliver had it in him," Mrs. Harrington was heard to declare later. "I just knew it was a question of waiting for his talent to blossom forth."

Although he knew she lied in her dentures, Oliver forgave her for all her ill-treatment of him, because she was his mother; and, whenever he had anything left over from his ambassadorial salary, he would send her a little something to add to her pension. That wasn't often, however, for, as everyone knows, an American ambassador's salary is inadequate to support him unless he has considerable personal resource, and the only personal resources Oliver had were his golden voice and his golden heart, neither of which paid for the champagne.



*At the time of his tragically premature death, C. M. Kornbluth had a number of literary projects in progress. Among them were several short stories being done with his long-time occasional collaborator, Frederik Pohl . . . who has just recently found the time to put the finishing touches on this story of an able, powerful Negro doctor, who devoted more time to controlling people than to understanding them.*

## THE WORLD OF MYRION FLOWERS

*by Frederik Pohl and C. M. Kornbluth*

THE WORLD OF MYRION FLOWERS, which was the world of the American Negro, was something like an idealized England and something like the real Renaissance. As it is in some versions of England, all the members of the upper class were at least friends of friends. Any Harlem businessman knew automatically who was the new top dog in the music department of Howard University a week after an upheaval of the faculty. And as it was in the Florence of Cellini, there was room for versatile men. An American Negro could be a doctor-builder-educator-realist-politician. Myrion Flowers was.

Boston-born in 1913 to a lawyer-realist-politician father and a

glamorous show-biz mother, he worked hard, drew the lucky number and was permitted to enter the schools which led to an M.D. and a license to practice in the State of New York. Power vacuums occurred around him during the years that followed, and willy-nilly he filled them. A construction firm going to waste, needing a little capital and a little common sense—what could he do? He did it, and accepted its stock. The school board coming to him as a sound man to represent “ah, your people”? He was a sound man. He served the board well. A trifling examination to pass for a real-estate license—trifling to him who had memorized a dozen textbooks in pathology, histology, anatomy



and *materia medica*—why not? And if they would deem it such a favor if he spoke for the Fusion candidate, why should he not speak, and if they should later invite him to submit names to fill one dozen minor patronage jobs, why should he not give him the names of the needy persons he knew?

Flowers was a cold, controlled man. He never married. In lieu of children he had proteges. These began as Negro kids from orphanages or hopelessly destitute families; he backed them through college and postgraduate schools as long as they worked to the limit of what he considered their abilities; at the first sign of a let-down he axed them. The mortality rate over the years was only about one non-graduate in four—Myrion Flowers was a better predictor of success than any college admissions committee. His successes numbered forty-two when one of them came to him with a brand-new Ph.D. in clinical psychology and made a request.

The protege's name was Ensal Brubacker. He took his place after dinner in the parlor of Dr. Flowers's Brooklyn brownstone house along with many other supplicants. There was the old woman who wanted an extension of her mortgage and would get it; there was the overstocked appliance dealer who wanted to be bailed out and would not be; there was the mother whose boy had a habit and the

husband whose wife was acting stranger and stranger every day; there was the landlord hounded by the building department; there was the cop who wanted a transfer; there was the candidate for the bar who wanted a powerful name as a reference; there was a store-front archbishop who wanted only to find out whether Dr. Flowers was right with God.

Brubacker was admitted to the doctor's study at 9:30. It was only the sixth time he had seen the man who had picked him from an orphanage and laid out some twenty thousand dollars for him since. He found him more withered, colder and quicker than ever.

The doctor did not congratulate him. He said, "You've got your degree, Brubacker. If you've come to me for advice, I'd suggest that you avoid the academic life, especially in the Negro schools. I know what you should do. You may get nowhere, but I would like to see you try one of the Four-A advertising and public relations firms, with a view to becoming a motivational research man. It's time one Negro was working in the higher levels of Madison Avenue, I believe."

Brubacker listened respectfully, and when it was time for him to reply he said: "Dr. Flowers, I'm very grateful of course for everything you've done. I sincerely wish I could— Dr. Flowers, I want to do research. I sent you my disser-

tation, but that's only the beginning—"

Myrion Flowers turned to the right filing card in his mind and said icily, "The Correlation of Toposcopic Displays, Beta-Wave Amplitudes and Perception of Musical Chord Progressions in 1,107 Unselected Adolescents. Very well. You now have your sandwich board with 'P', 'H' and and 'D' painted on it, fore and aft. I expect that you will now proceed to the job for which you have been trained."

"Yes, sir. I'd like to show you a—"

"I do not," said Dr. Flowers, "want you to be a beloved old George Washington Carver humbly bending over his reports and test tubes. Academic research is of no immediate importance."

"No, sir. I—"

"The power centers of America," said Dr. Flowers, "are government, where our friend Mr. Wilkins is ably operating, and the executive levels of the large corporations, where I am attempting to achieve what is necessary. I want you to be an executive in a large corporation, Brubacker. You have been trained for that purpose. It is now perhaps barely possible for you to obtain a foothold. It is inconceivable to me that you will not make the effort, either for me or for your people."

Brubacker looked at him in misery, and at last put his face into his hands. His shoulders shook.

Dr. Flowers said scornfully: "I take it you are declining to make that effort. Good-by, Brubacker. I do not want to see you again."

The young man stumbled from the room, carrying a large pigskin valise which he had not been permitted to open.

As he had expected to overwhelm his benefactor with what he had accomplished he had made plans for this situation. He could think only of returning to the university he had just left where, perhaps, before his little money ran out, he might obtain a grant. There was not really much hope of that. He had filed no proposals and sought no advice.

It did not help his mood when the overnight coach to Chicago was filling up in Grand Central. He was among the first and took a window seat. Thereafter the empty place beside him was spotted gladly by luggage-burdened matrons, Ivy-League-clad youngsters, harrumphing paper-box salesmen—gladly spotted—and then uncomfortably skimmed past when they discovered that to occupy it they would have to sit next to the gorilla - rapist - illiterate - tapdancer - mugger - menace who happened to be Dr. Ensal Brubacker.

But he was spared loneliness at the very last. The fellow who did drop delightedly into the seat beside him as the train began to move was One of His Own Kind. That is, he was unwashed, unlet-

tered, a quarter drunk on liquor that had never known a tax stamp, and agonizingly high-spirited. Brubacker could barely understand his Harlem jive.

But politeness and a terror of appearing "dicty" forced Brubacker to accept, at 125th Street, a choking swallow from the flat half-pint bottle his seatmate carried. And both of these things, plus an unsupportable sense of something lost, caused him to accept his seatmate's later offer of more paralyzing pleasures. In ten months Brubacker was dead, in Lexington, Kentucky, of pneumonia incurred while kicking the heroin habit, leaving behind him a badly puzzled staff doctor. "They'll say everything in withdrawal," he confided to his wife, "but I wonder how this one ever heard the word 'cryptesthesia.'"

It was about a month after that that Myrion Flowers received the package containing Brubacker's effects. There had been no one else to send them to.

He was shaken, that controlled man. He had seen many folk-gods of his people go the same route, but they were fighters, entertainers or revivalists; he had not expected it of a young, brilliant university graduate. For that reason he did not immediately throw the junk away, but mused over it for some minutes. His next visitor found him with a silvery-coppery sort of helmet in his hands.

Flowers' next visitor was a former Corporation Counsel to the City of New York. By attending Dr. Powell's church and having Dr. Flowers take care of his health he kept a well-placed foot in both the principal political camps of the city. He no longer much needed political support, but Flowers had pulled him through one coronary and he was too old to change doctors. "What have you got there, Myrion?" he asked.

Flowers looked up and said precisely, "If I can believe the notes of the man who made it, it is a receiver and amplifier for beta-wave oscillations."

The Corporation Counsel groaned, "God preserve me from the medical mind. What's that in English?" But he was surprised to see the expression of wondering awe that came on to Flowers's withered face.

"It reads thoughts," Flowers whispered.

The Corporation Counsel at once clutched his chest, but found no pain. He complained testily, "You're joking."

"I don't think I am, Wilmot. The man who constructed this device had all the appropriate dignities—summa cum laude, Dean's List, interviewed by mail by nearly thirty prospective employers. Before they found out the color of his skin, of course. No," he said reflectively. "I'm not joking, but there's one way to find out."

He lifted the helmet toward his head. The Corporation Counsel cried out, "Damn you, Myrion, don't do that!"

Flowers paused. "Are you afraid I'll read your mind and learn your secrets?"

"At my time of life? When you're my doctor? No, Myrion, but you ought to know I have a bad heart. I don't want you electrocuted in front of my eyes. Besides, what the devil does a Negro want with a machine that will tell him what people are thinking? Isn't guessing bad enough for you?"

Myrion Flowers chose to ignore the latter part of what his patient had said. "I don't expect it to electrocute me, and I don't expect this will affect your heart, Wilmot. In any event, I don't propose to be wondering about this thing for any length of time, I don't want to try it when I'm alone and there's no one else here." He plopped the steel bowl on his head. It fit badly and was very heavy. An extension cord hung from it, and without pausing Flowers plugged it into a wall socket by his chair.

The helmet whined faintly and Flowers leaped to his feet. He screamed.

The Corporation Council moved rapidly enough to make himself gasp. He snatched the helmet from Flowers's head, caught him by the shoulders and lowered him into his chair again. "You all right?" he growled.

Flowers shuddered epileptically and then controlled himself. "Thank you, Wilmot. I hope you haven't damaged Dr. Brubacker's device." And then suddenly, "It hit me all at once. It *hurt*!"

He breathed sharply and sat up.

From one of his desk drawers he took a physicians'-sample bottle of pills and swallowed one without water. "Everyone was screaming at once," he said. He started to replace the pills, then saw the Corporation Counsel holding his chest and mutely offered him one.

Then he seemed startled.

He looked into his visitor's eyes. "I can still hear you."

"What?"

"It's false angina, I think. But take the pill. But—" he passed a hand over his eyes—"you thought I was electrocuted, and you wondered how to straighten out my last bill. It's a fair bill, Wilmot. I didn't overcharge you." Flowers opened his eyes very wide and said, "The newsboy on the corner cheated me out of my change. He—" He swallowed and said, "The cops in the squad car just turning off Fulton Street don't like my having white patients. One of them is thinking about running in a girl that came here." He sobbed, "It didn't stop Wilmot."

"For Christ's sake, Myrion, lie down."

"*It didn't stop.* It's not like a radio. You can't turn it off. Now I

can hear—everybody! Every mind for miles around is *pouring into my head* WHAT IT THINKS ABOUT ME—ABOUT ME—ABOUT US!"

Ensai Brubacker, who had been a clinical psychologist and not a radio engineer, had not intended his helmet to endure the strain of continuous operation nor had he thought to provide circuit-breakers. It had been meant to operate for a few moments at most, enough to reroute a few neurons, open a blocked path or two. One of its parts overheated. Another took too much load as a result, and in a moment the thing was afire. It blew the fuses and the room was in darkness. The elderly ex-Corporation Council managed to get the fire out, and then picked up the phone. Shouting to be heard over the screaming of Myrion Flowers, he summoned a Kings County ambulance. They knew Flowers's name. The ambulance was there in nine minutes.

Flowers died some weeks later in the hospital—not Kings County, but he did not know the difference. He had been under massive

sedation for almost a month until it became a physiological necessity to taper him off; and as soon as he was alert enough to do so he contrived to hang himself in his room.

His funeral was a state occasion. The crowds were enormous and there was much weeping. The Corporation Counsel was one of those permitted to cast a clod of earth upon the bronze casket, but he did not weep.

No one had ever figured out what the destroyed instrument was supposed to have been, and Wilmot did not tell. There are inventions and inventions, he thought, and reading minds is a job for white men. If even for white men. In the world of Myrion Flowers many seeds might sturdily grow, but some ripe fruits would mature into poison.

No doubt the machine might have broken any mind, listening in on every thought that concerned one. It was maddening and dizzying, and the man who wore the helmet would be harmed in any world; but only in the world of Myrion Flowers would he be hated to death.



*The demands that magazines and book publishers have been making in recent years on Dr. Asimov's science non-fiction talents have brought his fiction output virtually to a halt. We are delighted that we were successful in chivvying him into producing this story—particularly because it illuminates so neatly an aspect of computer uses ordinarily left undeveloped in current scientific reports.*

## THE MACHINE THAT WON THE WAR

*by Isaac Asimov*

THE CELEBRATION HAD A LONG way to go and even in the silent depths of Multivac's underground chambers, it hung in the air.

If nothing else, there was the mere fact of isolation and silence—for the first time in a decade, technicians were not scurrying about the vitals of the giant computer, the soft lights did not wink out their erratic patterns, the flow of information in and out had halted.

It would not be halted long, of course, for the needs of peace would be pressing. Yet now, for a day, perhaps for a week, even Multivac might celebrate the great victory, and rest.

Lamar Swift, Executive Director of the Solar Federation, took

off the military cap he was wearing and looked down the long and empty main corridor of the enormous computer. He sat down rather wearily in one of the technician's swing-stools and his uniform, in which he had never been comfortable, took on a heavy and wrinkled appearance.

He said, "I'll miss it all, in a grisly fashion. It's hard to remember when we weren't at war with Deneb, and it seems against nature now to be at peace and to look at the stars with anxiety."

The two men with Swift were both younger than he. Neither was as gray, neither looked quite as tired.

John Henderson, thin-lipped and finding it hard to control the

relief he felt in the midst of triumph, said, "They're destroyed! They're destroyed! It's what I keep saying to myself over and over and I still can't believe it. We all talked so much, over so many years, about the menace hanging over Earth and all its worlds, over every human being, and all the time it was true, every word of it. And now we're alive and it's the Denebians who are shattered and destroyed. They'll be no menace now, ever again."

"Thanks to Multivac," said Swift, with a quiet glance at the imperturbable Jablonsky, who through all the war had been Chief Interpreter of science's oracle. "Right, Max?"

Jablonsky shrugged. Automatically, he reached for a cigarette and decided against it. He alone, of all the thousands who had lived in the tunnels within Multivac, had been allowed to smoke, but toward the end he had made definite efforts to avoid making use of the privilege.

He said, "Well, that's what *they* say." His broad thumb moved in the direction of his right shoulder, aiming upward.

"Jealous, Max?"

"Because they're shouting for Multivac? Because Multivac is the big hero in this war?" Jablonsky's craggy face took on an air of contempt. "What's that to me? Let Multivac be the machine that won the war, if it pleases them."

Henderson looked at the other two out of the corners of his eyes. In this short interlude that the three had instinctively sought out in the one peaceful corner of a metropolis gone mad; in this entr'acte between the dangers of war and the difficulties of peace, when, for one moment, they might all find surcease, he was conscious only of his weight of guilt.

Suddenly, it was as though that weight were too great to be borne longer. It had to be thrown off, along with the war—now!

Henderson said, "Multivac had nothing to do with victory. It's just a machine."

"A big one," said Swift.

"Then just a big machine. No better than the data fed it." For a moment, he stopped, suddenly unnerved at what he was saying.

Jablonsky looked at him, his thick fingers once again fumbling for a cigarette and once again drawing back. "You should know. You supplied the data. Or is it just that you're taking the credit?"

"No," said Henderson, angrily. "There is no credit. What do you know of the data Multivac had to use, predigested from a hundred subsidiary computers here on Earth, on the Moon, on Mars, even on Titan? With Titan always delayed and always that feeling that its figures would introduce an unexpected bias."

"It would drive anyone mad," said Swift, with gentle sympathy.

Henderson shook his head. "It wasn't just that. I admit that eight years ago when I replaced Lepont as Chief Programmer, I was nervous. But there was an exhilaration about things in those days. The war was still long range; an adventure without real danger. We hadn't reached the point where manned vessels had had to take over and where interstellar warps could swallow up a planet clean, if aimed correctly. But then, when the real difficulties began—"

Angrily—he could finally permit anger—he said, "You know nothing about it."

"Well," said Swift. "Tell us. The war is over. We've won."

"Yes." Henderson nodded his head. He had to remember that. Earth had won, so all had been for the best. "Well, the data became meaningless."

"Meaningless? You mean that literally?" said Jablonsky.

"Literally. What would you expect? The trouble with you two was that you weren't out in the thick of it. Max, you never left Multivac, and you, Mr. Director, never left the Mansion except on state visits where you saw exactly what they wanted you to see."

"I was not as unaware of that," said Swift, "as you may have thought."

"Do you know," said Henderson, "to what extent data concerning our production capacity,

our resource potential, our trained manpower—everything of importance to the war effort, in fact—had become unreliable and untrustworthy during the last half of the war? Group leaders, both civilian and military, were intent on projecting their own improved image, so to speak, so they obscured the bad and magnified the good. Whatever the machines might do, the men who programmed them and interpreted the results had their own skins to think of and competitors to stab. There was no way of stopping that. I tried, and failed."

"Of course," said Swift, in quiet consolation. "I can see that you would."

This time Jablonsky decided to light his cigarette. "Yet I presume you provided Multivac with data in your programming? You said nothing to us about unreliability."

"How could I tell you? And if I did, how could you afford to believe me?" demanded Henderson. "Our entire war effort was geared to Multivac. It was the one great weapon on our side for the Denebians had nothing like it. What else kept up morale in the face of doom but the assurance that Multivac would always predict and circumvent any Denebian move, and would always direct and prevent the circumvention of our moves? Great Space, after our Spy-warp was blasted out of hyperspace we lacked any



reliable Denebian data to feed Multivac, and we didn't dare make *that* public."

"True enough," said Swift.

"Well, then," said Henderson, "if I told you the data was unreliable, what could you have done but replace me and refuse to believe me? I couldn't allow that."

"What did you do?" said Jablonsky.

"Since the war is won, I'll tell you what I did. I corrected the data."

"How?" asked Swift.

"Intuition, I presume. I juggled them till they looked right. At first, I hardly dared. I changed a bit here and there to correct what were obvious impossibilities. When the sky didn't collapse about us, I got braver. Toward the end, I scarcely cared. I just wrote out the necessary data as it was needed. I even had Multivac Annex prepare data for me according to a private programming pattern I had devised for the purpose."

"Random figures?" said Jablonsky.

"Not at all. I introduced a number of necessary biases."

Jablonsky smiled, quite unexpectedly, his dark eyes sparkling behind the crinkling of the lower lids. "Three times a report was brought me about unauthorized uses of the Annex, and I let it go each time. If it had mattered, I would have followed it up and spotted you, John, and found out

what you were doing. But, of course, nothing about Multivac mattered in those days, so you got away with it."

"What do you mean, nothing mattered?" asked Henderson, suspiciously.

"Nothing did. I suppose if I had told you this at the time, it would have spared you your agony, but then if you had told me what you were doing, it would have spared me mine. What made you think Multivac was in working order, whatever the data you supplied it?"

"Not in working order?" said Swift.

"Not really. Not reliably. After all, where were my technicians in the last years of the war? I'll tell you—they were out feeding computers on a thousand different space devices. They were gone! I had to make do with kids I couldn't trust and veterans who were out of date. Besides, do you think I could trust the solid-state components coming out of Cyogenics in the last years? Cyogenics wasn't any better placed as far as personnel was concerned than I was. To me, it didn't matter whether the data being supplied Multivac were reliable or not. The *results* weren't reliable. That much I knew."

"What did you do?" asked Henderson.

"I did what you did, John, I introduced the bugger factor. I ad-

justed matters in accordance with intuition—and that's how the machine won the war."

Swift leaned back in the chair and stretched his legs out before him. "Such revelations. It turns out then that the material handed me to guide me in my decision-making capacity was a man-made interpretation of man-made data. Isn't that right?"

"It looks so," said Jablonsky.

"Then I perceive I was correct in not placing too much reliance upon it," said Swift.

"You didn't?" Jablonsky, despite what he had just said, managed to look professionally insulted.

"I'm afraid I didn't. Multivac might seem to say, Strike here, not there; Do this, not that; Wait, don't act. But I could never be certain that what Multivac seemed to say, it really did say; or what it really said, it really meant. I could never be certain."

"But the final report was always plain enough, sir," said Jablonsky.

"To those who did not have to make the decision, perhaps. Not to me. The horror of the responsibility of such decisions was unbearable and even Multivac was not sufficient to remove the weight. . . . But the important point is I was justified in doubting, and there is tremendous relief in that."

Caught up in the conspiracy of mutual confession, Jablonsky put

titles aside, "What was it you did then, Lamar? After all, you did make decisions. How?"

"Well, it's time to be getting back, perhaps, but—I'll tell you first. Why not? I did make use of a computer, Max, but an older one than Multivac, much older."

He groped in his pocket and brought out a scattering of small change—old fashioned coins dating to the first years before the metal shortage had produced a credit system tied to a computer-complex.

Swift smiled rather sheepishly. "I still need these to make money seem substantial to me. An old man finds it hard to abandon the habits of youth." He dropped the coins back into his pocket.

He held the last coin between his fingers, staring at it absently. "Multivac is not the first computer, friends, nor the best-known, nor the one that can most efficiently lift the load of decision from the shoulders of the executive. A machine *did* win the war, John; at least, a very simple computing device did, one that I used every time I had a particularly hard decision to make."

With a faint smile of reminiscence, he flipped the coin he held. It glinted in the air as it spun and came down in Swift's outstretched palm. His hand closed over it and brought it down on the back of his left hand. His right hand remained in place, hiding the coin.

"Heads or tails, gentlemen?"

*The English author of "The Fly," in a note accompanying the following, pointedly comments: "Surely, part, sometimes the best part, of a story is precisely that part that is not said but left to the imagination of the reader . . . ."*

## THE OTHER HAND

by George Langelaan

"DOCTOR, CAN YOU PLEASE CUT off my right hand?"

Looking over the rim of my glasses at the slim, athletic man sitting the other side of my desk, and meeting for a second his steady gaze in which I could read both fear and determination, I picked up automatically a blank index card.

"Your name, please, Monsieur?"

"Manoque. . . . Here is my card—Jean-Claude Manoque."

"Age?"

"Thirty-two."

"Address?"

At each question, I glanced at him. Well dressed, at his ease in spite of his request, softly spoken, he seemed a man of the world, and his address showed that he must be quite wealthy. His eyes betrayed nervousness, but people having made up their mind to undergo an operation are normally nervous.

"Was it your doctor who suggested this operation, Monsieur Manoque?"

I put my pen down and sat back when he explained that he had not consulted any other doctor but that he had come to me because I was a surgeon and happened to live near by.

"Show me your hand, please, Monsieur Manoque."

Leaning forward, he pushed it palm up over my desk. It was the strong, well-shaped hand of a man of action with long, square tipped, robust fingers. At the base of the thumb and on the edge of the palm, just below the little finger were two calluses which I touched with the tip of my finger.

"Tennis," he explained with a smile.

Turning the hand over, I looked at the neatly manicured nails and pressed my thumb here and there over the tendons and veins on the back of his sunburned hand where

a slight growth of hair from the wrist down to the fingers denoted strength, and one or two old scars on the knuckles could have been proof of a certain aggressiveness.

"Your other hand, please."

His hands were much alike; the only perceptible difference was that his right hand shook slightly, but too much tennis could again be the explanation.

"Thank you, Monsieur Manoque. Now will you please explain?"

"Is an explanation necessary?"

"I'm afraid so. What is the matter with your hand?"

"It is no longer mine, Doctor," he said slowly, looking me straight in the eyes.

"I see, and whose is it?" I asked, drawing a sheet of note-paper towards me and beginning to write. Years of experience had taught me never to show surprise or so much as smile at anything a patient said.

"I don't know and I don't care, but I want to get rid of it."

"Monsieur Manoque, I am afraid I can do nothing for you, but here is the address of one of my colleagues who, I am sure, can help you."

"A psychiatrist, I suppose. Thank you, Doctor, but what I need is a surgeon. I'm sorry I bothered you," he added, standing up, "but, of course, I should have known. I suppose I shall have to manage some other way."

"Yes, this is the address of a

psychiatrist, Monsieur Manoque, but you are mistaken if you do not think he can help you, and I strongly advise you to see this doctor."

"Thank you, no. I'll come back to see you, though," he said, bowing slightly and moving towards the door.

"I shall not be able to see you, Monsieur."

"Oh, I hope you will."

My assistant showed him out and as I waited for the next patient to be ushered in, I looked at the card I had just filled out, hesitated a moment, then tore it up and dropped it into the waste-paper basket.

Trying not to yawn, I was examining a collection of X-ray photos of the stomach of the perfectly healthy wife of a famous art-dealer, who was convinced that she should be operated on for an imaginary ulcer, when my assistant knocked and opened the door—a thing she never does.

"Excuse me, a very urgent case," she muttered, glancing at my patient who stared at her, then at me.

"Well, what is it?" I asked, going to the door and closing it.

"That young man, just now. He is in the surgery . . ."

"Do you mean to say he is still here?"

"He left but he's back. . . . He's had an accident."

"An accident?"

"His hand, Doctor."

He moaned and came to as I was doing some tricky sewing on the end of his maimed wrist.

"Can you keep quiet for another minute, or would you rather I put you to sleep?"

"I . . . I'll be quiet," he whispered.

"There," I said five minutes later, lighting a cigarette and sticking it into his mouth as my assistant gave him a double shot of morphia. "The ambulance will be round in a minute."

"Thanks," he said puffing at the cigarette. "Now I suppose you want to know . . ."

"No, not now. I'll see you later, at the clinic."

"Just as you like," he said, smiling. "Oh, by the way, I thought you, or the police or someone, might want it so . . . so I picked it up. It is in the left-hand pocket of my coat."

"What is, Monsieur Manoque?"

"My hand, of course," he drawled, blinking as the morphia was beginning to act.

That evening, I had the visit of the local Commissaire who told me how the cabinet-maker round the corner of my street had seen Monsieur Manoque enter his shop, go straight to the back where one of his employees was cutting chair legs, lean over him and hold his wrist against the whizzing saw-blade.

"The cabinet-maker is certain he

did it deliberately, but his employee is not so sure. Did he say anything to you about it, Doctor?"

"Only that should the police want to see his hand, he had picked it up and put it in his coat-pocket. It is there in that tray if you want it."

"No, thank you, Doctor."

I hesitated but finally decided against mentioning Monsieur Manoque's earlier visit; even if he was mad, he had confided in me of his own free will and I felt I had no right to reveal his secret.

At the clinic the next morning, I met the Commissaire coming out of my patient's room. Monsieur Manoque had apparently assured him that it was a deplorable accident due to his foolishness and that the cabinet-maker was in no way to blame.

"It was very good of you not to have told the police about my first visit yesterday, Doctor," he said as I examined the chart at the foot of his bed. "Otherwise, I suppose they would have had me certified."

"I never discuss the ailments of my patients, Monsieur Manoque, not even with them."

"I suppose you still think I could do with a psychiatrist."

"Of that I am sure."

"But, supposing there was an explanation, Doctor?"

"There is always an explanation."

"Yes. Would you like to hear mine?"

"In a few days' time, when you are well enough to come to my consulting room. And, if you don't mind, I have a friend who would be interested—a doctor, of course."

"Trying to help me in spite of myself?" he said with a broad smile. "All right, but your friend will surely find me a queer customer."

"Why should he?"

"Because I happen not to be insane."

"Yes, of course."

His bandaged arm still in a sling, perhaps a little thinner, but smiling, Monsieur Manoque came into my office a week later and I introduced him to my colleague and friend, Professor Boucot, who had arrived a few minutes before.

"Monsieur Manoque, I do not want you to feel in any way obliged to discuss your affairs, or even to give any sort of explanation. However, if you still want to, and only if you want to, I think that Professor Boucot can probably help you. And, of course, if you wish, I can leave you alone with him."

"No, Doctor, it is only fair that you should know the whole story."

"One more question, Monsieur Manoque. Would you mind very much if I switched on this tape-recorder?"

"Of course, it will never be used against me in any way?"

"That I can promise," I assured him.

"Switch on then, Doctor."

Here is Jean-Claude Manoque's story, as I myself typed it from my tape-recorder later:

It really started the day I picked up my brother-in-law's gold lighter and slipped it into my pocket. Once or twice before that, however, I had noticed that my right hand shook slightly and felt very hot, but it was only later that I remembered this detail. Even on the day when I picked up Ludo's lighter, I did not take much notice. I was worried, of course, and had hardly left the room when I rushed back, put the lighter down in front of him and apologized. Ludo did not take much notice either, it seemed. He merely laughed and said that he also had a knack of picking up other people's pens or cigarettes and then feeling foolish when he discovered them in his pockets, later.

What worried me, though, was that it had not been accidental. I tried to reason it out; I am not a thief, or a kleptomaniac. It was not a joke, either, nor was it to tease Ludo; I never tease people and, in any case, Ludo is not the sort of person one teases.

It was only later, a good deal later, when other things happened, that I suddenly realized that it was not I, but my hand that was acting with my knowledge, yet quite independently of my will. It was then also that I noticed the connection between

these strange actions of my hand and the heat and trembling that preceded them. For instance, when walking down the Champs Elysées with my wife and Ludo one evening, I did a most outrageous thing, and the very fact that my wife was there proves that though it was my hand, it was certainly not my will!

Suzon was walking between us, and so that she could hold my arm, she had given me her fashion magazine which I had rolled up in my right hand. Walking ahead of us were two girls, the type of girls which, for some mysterious reason, tourists consider as so typically Parisian and who, of course, are not—you know, the sort of girls that are just a little too well dressed, with heels two centimetres too high, skirts two centimetres too short, a little too tight around hips that swing just a little too much. Ludo grinned at me and winked, and I grinned back and Suzon shrugged her shoulders as we swung out to pass them. As we did so, I raised the rolled up magazine in my hand and brought it down with a resounding smack on the plumpest part of the girl nearest me! I was far more dumbfounded and shocked than the girl who turned, white with rage, and was evidently going to slap my face when her companion dragged her away, saying: "Can't you see he is drunk!" Suzon did not speak to me for two whole days.

A week later, something else happened. Ludo had come to pick me up for lunch, after which we were to drive out to the Racing Club for some tennis. As we were walking out of the little restaurant where I usually lunch, my hand deliberately picked a hat off a stand and put it on my head. It was a horrid, green velvet hat, a good size too small and although I was terrified that its owner would come running after me, I walked slowly out with it on top of my head! It was only when I had reached the street and Ludo stopped dead and stared at me that I was able to tear it off with my left hand, run back into the restaurant and hang it up where I had found it. No one seemed to pay any attention and I did not have to use the lame excuse that I had mistaken it for mine. It was the only excuse I could think up and when I told my brother-in-law, he was kind enough to pretend to believe me and to laugh heartily.

"But, Jean-Claude, you must be colour-blind! Suzon would drop dead if she saw you with a thing like that on your head," he joked.

As we were driving back from the Racing Club in the Bois de Boulogne, a few hours later, my hand again felt hot and started shaking. I stiffened, ready to react, but felt somewhat reassured. Nothing much could happen, since we were alone in my car. I therefore waited for an urge or a

desire to do something which I was confident I would easily and immediately repress. The only thing within reach seemed to be Ludo's handkerchief, unless of course the urge would be a more devilish one, perhaps an urge to pull his tie or his nose. I slowed down as a nurse wheeled her pram across the road ahead of us. She had almost reached the curb when my hand pulled the wheel down and not only was I unable to react, but I had no desire to do so! It seemed only much later—a bare fraction of a second really—that I tried, in vain, to pull the wheel back with my left hand. Just as we were gathering speed and heading straight for the nurse now on the pavement, I managed to stamp down on the brake and stall the car!

"*Nom de Dieu!*" I gasped.

"What's wrong?" queried Ludo, "For a second I thought you were trying to run that girl down."

"A . . . a sort of cramp in my hand," I lied. "It's all right now and we're nearly home."

"First you hit them with a rolled up magazine, then you go at them with your car. Next thing you know, you will be driving engines over open level-crossings," chuckled Ludo as I pulled up in the underground garage of our house.

Luckily Suzon had some friends and Ludo did not mention the hat or the car incident. With a word

of excuse, I left them to their tea, cakes and cards, and stepped into the next room where I have my books, a desk and some comfortable armchairs that don't look like torture instruments of the next war.

"Jean-Claude, have you any cigarettes?" asked Ludo, coming in uninvited.

"In the right-hand drawer of my desk over there, *mon vieux*," I said, pretending to be reading a letter.

"I say! That's some piece of artillery, isn't it!"

"Yes, a souvenir of the Resistance. It is an American Colt forty-five automatic."

"Is it loaded?"

"Yes, leave it alone."

"Ready to shoot?"

"Well, the safety catch is on."

"That thing there?"

"Yes," I said, a little annoyed. getting up and going over to the desk to pick up the gun to put it away in another drawer.

"How does it work? Tell me."

"Never mind," I said as my thumb flicked up the safety catch, and swinging the gun round towards Suzon's head which I could see through the glass panelled door, I squeezed the trigger!

Nothing happened and the trigger did not budge. I sat down, feeling sick and dizzy. Had the gun been cocked, I would have blown my wife's brains out, for there was a shell in the chamber.

"Jean-Claude, what in . . .



what made you do that?" stammered Ludo, white as a sheet. "You knew that it wasn't loaded, but still . . . you frightened me, you know."

"It is loaded or, rather, it was," I snapped, pulling out the clip and throwing out the live shell with a flick of my wrist.

"Why didn't it go off, then?"

"Because it wasn't cocked . . . and that was something my hand didn't know!"

"Didn't know! What are you talking about? Jean-Claude, are . . . are you all right? I mean . . ."

"Yes, I'm all right now," I said, throwing the empty gun into the drawer and putting away the clip and loose shell in the bottom drawer. "At least, that won't happen again."

It seemed that this time my hand had not shaken or given me any warning and that night, as I lay awake, I again shuddered at the thought that had the gun been cocked, I would have killed my wife before a dozen people. Trying to explain that my hand was no longer mine, that it had also tried to run down a nurse in the street, would not have got me very far with the police and nowhere with a jury. Turning on the light, I looked at my hand, touched it, clasped it with the other hand. Yes, it was mine all right and coordinating perfectly with the other; yet, when it acted strangely, it

was as though some other hand had got into it, forced its way into it. What I could not understand, however, was why I remained so passive, just as though I were watching another person. My left hand had somehow never reacted till too late. Had my left hand really tried to straighten out the car when my right hand had pulled it in towards the curb and the nurse with her pram? It was difficult to say. My foot had, thank goodness, stamped on the brake pedal in time.

Though I could not explain it, there were clearly times when my right hand was no longer really mine, but I knew that telling anyone about it would be quite useless. A doctor, it was evident, would have diagnosed some form of schizophrenia, a typical case of split and even opposing personalities, etc., etc. Therefore, before going to see a doctor—or the police who would inevitably call in a doctor—I would have to be able to prove that the hand was not mine.

That proof I had the next day!

At the office, I was jotting down a telephone number when it suddenly occurred to me that, whereas I always do my sixes downwards and very straight, I was starting with the loop and doing them upwards, with curved tails. Fascinated, I sat at my desk and tried scribbling a few words on a pad. As I did so, my hand went

hot and began to tremble, and I found myself holding my pen in a totally different way, across my second finger with much more slant than usual, and the writing was no longer mine but that of another!

Amazed, I drew a sheet of paper towards me and let my hand write. With a strange detachment, I watched it writing quite fast, faster than I can usually write. Perhaps the strangest thing of all, the one thing that showed I was not my own master but a mere machine, was that I did not know what my hand was about to write. I read the words as they appeared on the paper, one by one, letter by letter, as though I were watching over some other person's shoulder. The hand, which was certainly that of another at that particular moment, stopped in the middle of a sentence, and felt like mine again. In front of me, were some fifteen lines, evidently written by someone who had seen a play, but a play I had never heard of!

Was there such a play, I wondered, opening my paper and looking for the films and theatre page. There was, and the leading article was a criticism of it! The critic had been rather harder on the actors than the one who had used my hand, but there was no possible mistake, it was about the same play! I read the handwritten text over and over and, on a hunch,

sent the office boy out to get me all the morning papers. I was right; the fourth paper I opened—one I never read—contained, word for word, the text my hand had written and copied!

Again I thought of going round to the nearest police station; but no, it was no use. I could imagine myself trying to explain that I had someone else's hand, or that someone else was using my hand. Then I remembered Suzon's friend, the graphologist who worked for the police. Finding her telephone number was quite easy. Could she kindly give me her opinion on a half page of handwriting? Yes, it was important.

"Why do you want a report on this handwriting, Monsieur Manoque?" she asked an hour later, frowning.

"It is the writing of . . . of a person who applied for a job this morning, and . . . and . . ."

"And you do not like him—for this is the writing of a man—and you are quite right. It is the writing of a bad and even perhaps a dangerous man, the writing of a very determined man who will hesitate at nothing to reach his ends, but with, it would seem, a marked preference for stealth and cruelty. It is one of the most unpleasant handwritings I have ever come across."

"That just about sums up my feelings about . . . about him. Thank you very much indeed."

Outside, as I fumbled for the key of my car, I saw a small leather wallet in the gutter. It was a cheque-book belonging to a certain Monsieur Ch. Ralingue, and since the cheques were payable at the Crédit Lyonnais branch office of the Avenue Victor-Hugo, which was on my way home, I slipped it into my pocket and drove off.

Suzon was out when I got home, and as I took off my coat, I remembered the cheque-book. I hesitated, then decided that I would drop by the bank on my way to work next morning, but in order not to forget, I put it on my desk. As I turned, my hand felt hot and heavy, as though it had been suddenly filled with hot water.

It was still hot and shaking as I sat down and let it grab my fountain pen, unscrew the cap, open the cheque-book and tear out a cheque. It seemed to hesitate, then slowly but in a bold handwriting which I had never seen before, wrote out a cheque for ten thousand new francs to my order! It dated the cheque then, with a slow flourish, very carefully and laboriously it seemed, it signed the name of Ralingue. By the time my fountain pen had been put back in my pocket, the ink on the cheque was dry and the hand folded it, took out my wallet and put it carefully away!

The surprising thing is that I left it there, that I did not react afterwards, and I had the horrid

feeling that the hand was beginning to get the better of me. It was not merely a hand but also an arm that was no longer mine. Another thing that made me shudder but which I could do nothing about, was that my left hand, though still mine, was now coordinating with the mysterious hand on the end of my right arm. I had used both hands to put the cheque away in my wallet. Of course, I could do nothing with such a cheque, but the mere fact that I had written it out and put it away like a lunatic was terrifying.

When I walked into the Crédit Lyonnais branch office the next morning, I was simply going to hand in the cheque-book and say nothing about the cheque I had torn out. However, instead of taking it out of my pocket, I went to the paying teller, and turned over the forged cheque, calmly endorsed it in my own handwriting and pushed it across the desk together with my driving license. With barely a glance at me, the cashier noted the number of my license and passed the cheque to someone behind him. I waited as calmly as though I had handed in one of my own cheques in my own bank, and, when my name was called, quietly stepped up to collect. Ten thousand new francs is a million old francs, quite a sum, and although I was paid in brand new notes, I had to stuff three of my pockets with them.

No sooner did I get outside than I felt sick and faint. My hand, *the* hand, had forged Monsieur Ralingue's signature so well that his cheque had been cashed with the greatest of ease!

"What on earth is the matter?" asked Suzon, surprised at seeing me back home. "Oh, Jean-Claude! You look ill. Shall I call the doctor?"

"No, thank you. I'll be all right. I just need a little rest and quiet, dear."

That afternoon, I went back to the bank and paid into Monsieur Ralingue's account the million francs still in my pockets. The cheque-book, I had torn into pieces which I dropped down a drain.

From then on, however, my life was hell. I wrote more and more, sometimes in my own writing but often in that of others. I thus turned out quite a few love letters addressed to my wife and which my hand signed André. Mind, I was not jealous of Suzon; I never have been and I am quite sure that she has never had an affair with any other man. But this automatic letter writing, as was every action of *the* hand, was quite unrelated to any of my desires, feelings or emotions. Perhaps more agonizing than the actual writing of the letters was the fact that, even when I was not under the influence of *the* hand, I was quite unable to destroy them. Yes, I was fully conscious of the danger they rep-

resented, and I wanted to get rid of them, but there was a will stronger than mine, a will that had a reason, a plan, which the beastly hand would disclose sooner or later. As time passed and I began to suspect what I was being driven to, I reacted less and less, and the more obvious things became, the less I was able to resist.

The night when the hand made me write to my brother-in-law, explaining that I was going to kill Suzon because she had a lover, I made a desperate effort to break free. First, I tried running away. I left the house all right, but returned shortly after my beastly hand had posted the letter to Ludo. Then, as in a dream, I went to the drawer where my pistol was and, like a spectator watching a film, I watched my hand reloading it and noticed with horror that my left hand was helping!

Twice I managed to bring the gun up to my own heart but, each time, as though made of iron and weighing a thousand kilos, my right hand pulled it down. Desperately, I tried to grasp the pistol in my left hand, and I might have succeeded had Suzon not suddenly rushed in and swept the gun off my desk.

"Jean-Claude, *chéri!* What has happened? Tell me, you must!"

"Nothing. Take that gun away. Hide it . . . No, throw it away. . . . I never want to see it again!" I sobbed.

"You silly darling. Why did you want to kill yourself when—"

"Take it away! Get out of here!" I shouted, as my hand began to sweat and tremble.

"But, Jean-Claude—"

"Name of God! Get out!"

That night, I walked along the quays of the Seine, as far as the Charenton bridge, crossed over to the left bank, and walked all the way back to the Auteuil Viaduct. When at last I crawled home, I was relieved to find that Suzon was not there. I was glad of it for, as long as she was out of my sight, she was safe.

My mind was made up. Since I was unable to fight, I would see a psychiatrist. Better still, instead of wasting precious time with a doctor who would try to talk me into or out of some non-existent state of mind, I would go straight to the Sainte Anne Hospital and beg to be taken in and kept under observation for a while. From there, I would find out where Suzon was, and get in touch with her. She would of course come immediately, but everything would be all right, since I myself would ask to be watched closely.

Having made myself a large cup of strong black coffee, I changed, had a cold shower, shaved carefully, dressed and went out.

What happened on the way down? I do not know. I felt quite fit but, instead of going to the garage to get my car and drive to

the hospital, I walked out and jumped on a bus going to the Bourse, and it was just nine o'clock when I found myself strolling slowly up the Rue Vivienne towards the Boulevards, vaguely amused at the way people late for their work were rushing around. I gazed at the shops and stopped outside a gunsmith's then, petrified, watching my right hand go up to the door handle, and the next moment I was inside, asking to see pistols.

A .22 competition pistol, a deadly thing at close range, but which can still be purchased without a police permit in Paris, was weighing down my coat pocket when I walked out of the shop. I was still thinking of the hospital and still wanting to reach it but, instead, I started walking home. It is surprising that I was not arrested; several times people turned and watched me, taking me for a drunkard, and little dreaming that I was putting up a desperate fight not to go home. I somehow managed to reach the Bois de Boulogne, where I sat on the grass and slept, I think, for it was almost three o'clock when I got up. I think it was then I decided that the only thing to do was get rid of my right hand, and I remembered that there was a surgeon in my street. But of course, the moment I asked the doctor if he would cut off my hand, I knew that it was hopeless and that I was only wasting my

time and his, and mine was especially precious since, for all I knew, *the* hand might again, at any moment, take over. I therefore did not insist and left as rapidly as I could.

Out in the street, the whine of a saw made me turn and stop dead. There, at last, was the solution, the radical way out of all my troubles!

I walked into the old-fashioned cabinet-maker's shop, pretended to say something, smiled at the man working at the saw and, before my courage failed me, I quickly grasped my wrist and held it against the spinning blade. It burned but was not otherwise very painful and though I felt sick at the sight of my gushing blood, I quietly picked up my hand and slipped it into my coat pocket before sitting down a little heavily and slowly passing out as, sobbing and swearing, the joiner knotted a piece of rope around my arm.

"Your case is not unique, Monsieur Manoque," said Professor Boucot when the story was finished. "I suppose you know that?"

"I know what you mean, Professor. You think that it was schizophrenia, momentarily or perhaps definitely cured through some form of what I believe you call autopunishment and that, now that I have lost my right hand, I may well be on the road to recovery?"

"That is roughly what it amounts to, Monsieur Manoque. Don't you think so?"

I certainly did, until the Commissaire again called on me that very evening.

"About Monsieur Manoque, Doctor, are you quite sure it was an accident?"

"Surely, the cabinet-maker who saw the accident can answer that question better than I can, Commissaire?"

"He swears it was no accident."

"And supposing it wasn't, then what?"

"I don't know, I really don't know," said the Commissaire, lighting a cigarette. "Doctor, I haven't the slightest clue, but a coincidence so strange that it seems it ought to be a clue."

"What coincidence, or is that a secret?"

"No. It amounts to this: a good man and a bad man get drawn together and they both get their right hand cut off on the same day, at the same time, though in different ways and in different parts of town. Knowing the bad man as I do, there is, there *must* be something fishy about such a coincidence, but what? That is the question."

"I take it that the good man is Jean-Claude Manoque; could the bad man perhaps be his brother-in-law?"

"What do you know about Ludo Billet-Doux, Doctor?"

"Is that his name?"

"Ludovic Couralin got his nickname of Billet-Doux from his speciality of writing highly convincing fake love-letters."

"Fake love-letters!" I gasped.

"Yes, generally for blackmail purposes. That was merely one of the strings to his bow. Now, please tell me what you know about his letter-writing?"

"Just a moment. Was forgery another of his . . . hobbies?"

"Yes, he got five years on one count alone. He's been out almost three years now and apparently going straight, ever since his sister got him a job in her husband's firm. But you know that he is as crooked as ever, I gather."

"You are right, Commissaire; there is something, but it is something which you will never be able to prove."

"Do you really think so? I am paid to prove things, you know."

"All right, Commissaire, I'll show you that there is something."

Finding Monsieur Charles Ralingue was easy. Yes, he had lost a check-book and had reported his loss to the bank. Yes, indeed, there had been a query about a million-franc cheque, but it must have been a mistake for the bank had credited the account of the same amount a few hours later.

At the bank, however, Monsieur Ralingue's eyes nearly popped out of his head when he was shown

the cheque for ten thousand new francs.

"*Ca alors!*" he exclaimed. "Yes, it is my signature all right. But who is this Monsieur Manoque? I can't understand. I am certain that I never wrote or signed this cheque."

"Don't worry, Monsieur Ralingue, it won't happen again," said the Commissaire.

At the Cochin hospital, where most people injured in street accidents are rushed to, I met Ludovic Couralin, a swarthy, sharp-eyed, beak-nosed, blue-chinned man who flashed a surprisingly pleasant smile at us. He was dressed and waiting for the nurse who had gone to get his discharge certificate signed.

"Ludo, this is a friend of mine," said the Commissaire, offering him a cigarette. "We know everything about your little game."

"You cops are all the same," he said, laughing but examining me closely. "There is no little game. I have a hundred witnesses, I tell you. The Metro station was crowded with people who saw me fall in front of the train."

"What was it made you fall, Ludo?" I asked, trying to make my voice as smooth as that of the Commissaire.

"Someone grabbed my right arm and pushed me, but no one saw who it was. When I knew that I was off balance and had to fall, I went down as easy as anything

and sprawled out on my back but, somehow, I cannot understand why, I was unable to pull my hand away in time. The wheel got it."

"Suppose I tell you who did that?"

"Who?"

"The man whose hand you had been using, Ludo," I said slowly.

"Come on, out with it!" snapped the Commissaire, as Ludo sat down on the edge of his bed.

"Out with what? I . . . I don't know what you're both talking about," he gasped, wiping his forehead with his bandaged arm.

"Yes, you do, Ludo," I said softly. "If Jean-Claude had killed his wife the way you had planned, they had no children, no other relatives, and you would have come into quite a nice fortune . . . and what with your brother-in-law ending up with a life sentence for an abominable crime, you would also have found yourself at the head of a prosperous business."

"Poor old Jean-Claude, is that what he thinks?" said Ludo, grinning. "But even if it were true, he can't prove anything because there isn't anything to prove!"

"Don't be too sure. Jean-Claude doesn't know yet. We discovered it all on our own, Ludo."

The smile remained on Ludo's lips as we left him, but there was that in his eyes which made me grateful to be leaving his presence.

"Now, Doctor, and for the last time, will you kindly explain,"

said the Commissaire as we walked out of the hospital.

"Come to my office and you will hear Jean-Claude himself give you all the answers, Commissaire."

Having made him comfortable and mixed him a drink, I brought out the tape-recorder.

For a long time after it had played, he was silent.

"Doctor, it can't be true, can it?" he said at last.

"Is there any other possible explanation, Commissaire?"

"Yes and no," he said, finishing his drink. "I feel like the kid the first time he saw a giraffe and didn't believe it. But, supposing that it is true, how could Manoque shove his brother-in-law under the Metro, Doctor?"

"How did Ludo make him try to shoot his wife, forge a signature to a cheque? There are so many forces in nature and in us which we cannot yet understand, Commissaire. Forces which you classify as strange or surprising coincidences."

As the Commissaire left my house, a heavy flower pot fell and exploded on the pavement. He was not able to find out what window it had come from and, though I tried, I was unable to tell him that my left hand had suddenly become very hot and started shaking after his departure and that, like an automation, I had simply followed my hand to the window and watched it push out a flower pot, the largest it could find.





*Dr. Asimov, fascinated by extremes, talks of the 262,500-pound Blue Whale . . . the  $\frac{1}{208}$ -of-a-pound shrew . . . and other large and small creatures. . . .*

## THAT'S ABOUT THE SIZE OF IT

*by Isaac Asimov*

NO MATTER HOW MUCH WE TELL OURSELVES THAT QUALITY IS what counts, sheer size remains impressive. The two most popular types of animals in any zoo are the monkeys and the elephants, the former because they are embarrassingly like ourselves, but the latter simply because they are huge. We laugh at the monkeys but stand in silent awe before the elephant. And even among the monkeys, if one were to place Gargantua in a cage, he would outdraw every other primate in the place. In fact, he did.

This emphasis on the huge naturally makes the human being feel small, even puny. The fact that mankind has nevertheless reached a position of unparalleled domination of the planet is consequently presented very often as a David-and-Goliath saga, with ourselves as David.

And yet this picture of ourselves is not quite accurate, as we can see if we view the statistics properly.

First, let's consider the upper portion of the scale. I've just mentioned the elephant as an example of great size, and this is hallowed by cliché. "Big as an elephant" is a common phrase.

But, of course, the elephant does not set an unqualified record. No land animal can be expected to. On land, an animal must fight unmodified gravity. Even if it were not a question of lifting its bulk several feet off the ground and moving it more or less rapidly, that fight with gravity sets sharp limits to size. If an oversized animal were developed which lay flat on the ground, and lived out its life as motionlessly as

an oyster, it would still have to heave masses of tissue upward with every breath. A beached whale dies for several reasons, but one is that its own weight upon its lungs slowly strangles it to death.

In the water, however, buoyancy largely negates gravity and a mass that would mean crushing death on land is supported in water without trouble.

For that reason, the largest creatures on earth, present or past, are to be found among the whales. And the species of whale that holds the record is the Blue Whale or, as it is alternatively known, the Sulfur-bottom. One specimen of this most gigantic of giants has been recorded with a length of 108 feet and a weight of 131¼ tons.

Now the Blue Whale, like ourselves, is a mammal. If we want to see how we stand among the mammals, as far as size is concerned, let's see what the other extreme is like.

The smallest mammals are the shrews, creatures that look superficially mouse-like, but are not mice or even rodents. Rather, they are insectivores, and are more closely related to us than to mice, actually. The smallest full-grown shrew weighs about  $\frac{1}{13}$  of an ounce.

Between these two mammalian extremes stretch a solid phalanx of animals. Below the Blue Whale are other smaller whales, then creatures such as elephants, walruses, hippopotamuses, down through moose, bears, bison, horses, lions, wolves, beavers, rabbits, rats, mice and shrews. Where in this long list from largest whale to smallest shrew is man?

To avoid any complications, I will use myself as a measure; partly because my weight comes to a good, round figure of 200 pounds. (However, I am on one of my periodic diets and I hope said figure, while retaining its well-known lovability<sup>1</sup> in full, will not remain quite as round as it is now<sup>2</sup>.)

Now we can consider man either a giant or a pygmy, according to the frame of reference. Compared to the shrew he is a giant, of course, and compared to the whale he is a pygmy. How do we decide to which view we ought to give the greater weight?

In the first place, it is confusing to compare tons, pounds and ounces, so let's put all three weights into a common unit. In order to avoid fractions (just at first, anyway) let's consider grams as the common unit. (For reference purposes, one ounce equals about 28.35 grams, one pound equals about 453.6 grams, and one ton equals about 907,000 grams.)

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<sup>1</sup> Hoh!—K. E.

<sup>2</sup> Hoh!—K. E.

Now, you see, we can say that a Blue Whale weighs as much as 120,000,000 grams while a shrew weighs as little as 2 grams. In between is man (well, anyway, me) with a weight of 90,700 grams.

We are tens of thousands of grams heavier than a shrew, but a whale is tens of *millions* of grams heavier than a man, so we might insist that we are much more of a pygmy than a giant and insist on retaining the David-and-Goliath picture.

But the human sense and judgement does not differentiate by subtraction; it does so by division. The difference between a two-pound weight and a six-pound weight seems greater to us than that between a six-pound weight and a twelve-pound weight, even though the difference is only four pounds in the first case and fully six pounds in the latter. What counts, it seems, is that six divided by two is three, while twelve divided by six is only two. Ratio, not difference, is what we are after.

Naturally, it is tedious to divide. As any fourth-grader and many adults will maintain, division comes under the heading of advanced mathematics. Therefore, it would be pleasant if we could obtain ratios by subtraction.

To do this, we take the logarithm of a number, rather than the number itself. For instance, the most common form of logarithms are set up in such a fashion that 1 is the logarithm of 10, 2 is the logarithm of 100, 3 is the logarithm of 1,000 and so on.

If we use the numbers themselves, we would point out an equality of ratio by saying that  $1,000/100$  is equal to  $100/10$ , which is division. But if we used the logarithms, we could point out the same equality of ratio by saying that  $3-2$  is equal to  $2-1$ , which is subtraction.

Or, again,  $1,000/316$  is roughly equal to  $316/100$ . (Check it and see.) Since the logarithm of 1,000 is 3 and the logarithm of 100 is 2, we can set the logarithm of 316 equal to 2.5, and then, using logarithms, we can express the equality of ratio, by saying that  $3-2.5$  is equal to  $2.5-2$ .

So let's give the extremes of mammalian weight in terms of the logarithm of the number of grams. The 120,000,000-gram blue whale can be represented logarithmically by 8.08, while the 2-gram shrew is 0.30. As for the 90,700-gram man, he is 4.96.

As you see, man is about 4.7 logarithmic units removed from the shrew but only about 3.1 logarithmic units removed from the largest whale. We are therefore much more nearly giants than pygmies.

In case you think all this is mathematical folderol and that I am pulling a fast one, what I'm saying is merely equivalent to this: A man

is 45,000 times as massive as a shrew, but a blue whale is only 1,300 times as massive as a man. We would seem much larger to a shrew than a whale does to us.

In fact, a mass that would be just intermediate between that of a shrew and a whale would be one with a logarithm that was the arithmetical average of 0.30 and 8.08, or 4.19. This logarithm represents a mass of 15,500 grams or 34 pounds. By that argument a medium-sized mammal would be about the size of a four-year-old child, or a medium-sized dog.

Of course, you might argue that a division into two groups—pygmy and giant—is too simple. Why not a division into three groups—pygmy, moderate and giant? Splitting the logarithmic range into three equal parts, we would have the pygmies in the range from 0.30 to 2.90, the moderates from 2.90 to 5.40 and the giants from 5.40 to 8.08.

Put into common units this would mean that any animal under  $1\frac{3}{4}$  pounds would be a pygmy and any animal over 550 pounds would be a giant. By that line of thinking, the animals between, including man, would be moderate-size. This seems reasonable enough, I must admit, and it seems a fair way of showing that man, if not a pygmy, is also not a giant.

But if we're going to be fair, let's be fair all the way. The David-and-Goliath theme is introduced with respect to man's winning of overlordship on this planet; it is the victory of brains over brawn. But in that case, why consider the whale as the extreme of brawn. Early man never competed with whales. Whales stayed in the ocean and man stayed on land. Our battle was with land creatures only, so let's consider land mammals in setting up our upper limit.

The largest land mammal that ever existed is not alive today. It is the Baluchitherium, an extinct giant rhinoceros that stood 18 feet tall at the shoulder, and must have weighed in the neighborhood of  $13\frac{1}{2}$  tons.

As you see, the Baluchitherium (which means "Baluchi beast," by the way, because its fossils were first found in Baluchistan) is only  $1/10$  the mass of a Blue Whale. Since the ratio 10 is represented by the logarithm 1, you won't be surprised to hear that the logarithmic value of the Baluchitherium's mass (in grams) is less than that of the Blue Whale and stands at 7.08.

(From now on, I will give weights in common units but will follow it with a logarithmic value in parentheses. Please remember that this is the logarithm of the weight in grams every time.)

But, of course, the Baluchitherium was extinct before the coming of man and there was no competition with him either. To make it reasonably fair, we must compare man with those creatures that were alive in his time and therefore represented potential competition. The largest mammals living in the time of man are the various elephants (at last). The largest living African Elephant may reach a total weight of 7 tons (6.80). To be sure, it is possible that man competed with still larger species of elephant now extinct, but that makes little difference. The largest elephant that ever existed could not have weighed more than 10 tons (6.96).

(Notice, by the way, that an elephant is only about half the weight of a Baluchitherium and only 5 percent the weight of a blue whale. In fact, a full-grown elephant of the largest living kind is only about the weight of a new-born Blue Whale baby.)

Nor am I through. In battling other species for world domination, the direct competitors to man were other carnivores. An elephant is herbivorous. It might crush a man to death accidentally, or on purpose if angered, but otherwise it has no reason to harm man. A man does not represent food to an elephant.

A man does represent food to a saber-tooth tiger, however, who, if hungry enough, would stalk, kill and eat a man who was only trying to stay out of the way. *There* is the competition.

Now the very largest animals are almost invariably herbivores. There are more plant calories available than animal calories and a vegetable diet can, on the whole, support larger animals than a meat diet will. (Which is not to say that some carnivores aren't much larger than some herbivores.)

To be sure, the largest animal of all, the Blue Whale is, technically, a carnivore. However, he lives on tiny creatures strained out of ocean water and this isn't so far removed, in a philosophical sense, from browsing on grass. He is not a carnivore of the classic type, the kind with teeth that go snap!!

The largest true carnivore in all earth's history is the Sperm Whale (of which Moby Dick is an example). A good Sperm Whale, with a large mouth and a handsome set of teeth in its lower jaw, may weigh 60 tons (7.74).

But there again, we are not competing with sea-creatures. The largest *land* carnivore among the mammals is the Great Alaskan Bear (also called the Kodiak Bear) which occasionally tips the scale at 1600 pounds, (5.86). I don't know of any extinct land carnivore among the mammals that was larger.

Turning to the bottom end of the scale, there we need make no adjustments. The shrew is a land mammal and a carnivore and, as far as I know, is the smallest mammal that ever existed. Perhaps it is the smallest mammal that can possibly exist. The metabolic rate of mammals goes up as size decreases because the surface-to-volume ratio goes up with decreasing size. Some small animals might (and do) make up for that by letting the metabolic rate drop and the devil with it, but a warm-blooded creature cannot. It must keep its temperature high, and, therefore, its metabolism racing.

A warm-blooded animal the size of a shrew must eat just about constantly to keep going. A shrew starves to death if it goes a couple of hours without eating; it is always hungry and is very vicious and ill-tempered in consequence. No one has ever seen a fat shrew or ever will. (And if any Gentle Reader wishes to send pictures of the neighbor's wife in order to refute that statement, please don't.)

Now let's take the range of land-living mammalian carnivores and break that into three parts. From 0.30 to 2.15 are the pygmies, from 2.15 to 4.00 the moderates and from 4.00 to 5.86 the giants. In common units that would mean that any creature under 5 ounces is a pigmy, anything from 5 ounces to 22 pounds is a moderate, and anything over 22 pounds is a giant.

Among the mammalian land carnivores of the era in which man struggled through to, first, survival, and then victory, man is a giant. In the David-and-Goliath struggle, one of the Goliaths won.

Of course, some suspicion may be aroused by the fact that I am so carefully specifying mammals all through. Maybe man is only a giant among mammals, you may think, but were I to broaden the horizon he would turn out to be a pigmy after all.

Well, not so. As a matter of fact, mammals in general are giants among animals. Only one kind of non-mammal can compete (on land) with the large mammals, and they are the reptile monsters of the Mesozoic; the large group of animals usually referred to in common speech as "the dinosaurs."

The largest dinosaurs were almost the length of the very largest whales, but they were mostly thin neck and thin tail, so that they cannot match those same whales in mass. The bulkiest of the large dinosaurs, the Brachiosaurus, probably weighed no more than 50 tons (7.65) at most.

This is respectable, to be sure. It is seven times the size of the Baluchitherium, but it is only  $\frac{2}{3}$  the size of the Blue Whale. And, as is to be expected, the largest of the dinosaurs were herbivorous.

The largest carnivorous dinosaur was the famous *Tyrannosaurus Rex*, which weighed perhaps as much as 15 tons (7.13). It is clearly larger than the *Baluchitherium*, rather better than twice the weight of the African Elephant and nearly twenty times the weight of the poor little Kodiak Bear.

The *Tyrannosaurus Rex* was, beyond doubt, the largest and most fearsome land carnivore that ever lived. He and all his tribe, however, were gone from the earth millions of years before man appeared on the scene.

If we confine ourselves to reptiles alive in man's time, the largest appear to be certain giant crocodiles of Southeast Asia. Unfortunately, reports about the size of such creatures always tend to concentrate on the length rather than the weight (this is even truer of snakes) and some are described as approaching 30 feet in length. I estimated that such monsters should also approach a maximum of 2 tons (6.25) in weight.

I have a more precise figure for the next most massive group of living reptiles, the turtles. The largest turtle on record is a marine leatherback with a weight of 1,902 pounds (5.93), or not quite a ton.

To be sure, neither of these creatures is a land animal. The leatherback is definitely a creature of the sea, while crocodiles are river creatures. Nevertheless, as far as the crocodiles are concerned I am inclined not to omit them from the list of man's competitors. Early civilizations developed along tropical or sub-tropical rivers and who is not aware of the menace of the crocodile of the Nile, for instance? And certainly it is a dangerous creature with a mouth and teeth that go snap! to end all snaps! (What jungle movie would omit the terrifying glide and gape of the crocodile.)

The crocodiles are smaller than the largest land-living mammals, but the largest of these reptiles would seem to outweigh the Kodiak Bear. However, even if we let 5.93 be the new upper limit of the "land carnivores," man would still count as a giant.

If we move to reptiles that are truly of the land, their inferiority to mammals in point of size is clear. The largest land reptile is the Galapagos Tortoise, which may reach 500 pounds (5.35). The largest snake is the Reticulated Python, which may reach an extreme length of 33 feet. Here again, weights aren't given as all the oohing and aahing are over the measurement by yardstick. However, I don't see how this can represent a weight greater than 450 pounds (5.32). Finally, the largest living lizard is the Komodo Monitor, which grows to a maximum length of 12 feet and to a weight of 250 pounds (5.05).

The fish make a fairly respectable showing. The largest of all fish,

living or extinct, is the whale shark. The largest specimens of these are supposed to be as large and as massive as the sperm whale, though perhaps a 45-ton maximum (7.61) might be more realistic. Again, these sharks are harmless filterers of sea water. The largest carnivorous shark is the White Shark, which reaches lengths of 20 feet and possibly a weight of  $2\frac{1}{2}$  tons (6.36).

Of the bony fish, the largest (such as the tuna, swordfish or sturgeon) may tip the scales at as much as 3,000 pounds (6.13). All fish, however, are water creatures, of course, and not direct competition for any man not engaged, for example, in such a highly specialized occupation as pearl-diving.

The birds, as you might expect, make a poorer showing. You can't be very heavy and still fly.

This means that any bird that competes with man in weight must be flightless. The heaviest bird that ever lived was the flightless *Aepyornis* of Madagascar (also called the elephant-bird) which stood ten feet high and may have weighed as much as 1,000 pounds (5.66). The largest moas of New Zealand were even taller (twelve feet) but were more lightly built and did not weigh more than 500 pounds (5.36). In comparison, the largest living bird, the ostrich—still flightless—has a maximum weight of about 300 pounds (5.13).

When we get to flying birds, weight drops drastically. The albatross has a record wingspread of 12 feet, but wings don't weigh much and even the heaviest flying bird probably does not weigh more than 35 pounds (4.20). Even the pteranodon, which was the largest of the extinct flying reptiles, and had a wingspread of up to 25 feet, was all wing and no body, and probably weighed less than an albatross.

To complete the classes of the vertebrates, the largest amphibians are giant salamanders found in Japan which are up to 5 feet in length and weigh up to 90 pounds (4.60).

Working in the other direction, we find that the smallest bird, the Bee Hummingbird of Cuba, is probably about the size of the smallest shrew. (Hummingbirds also have to keep eating almost all the time, and starve quickly.)

The cold-blooded vertebrates can manage smaller sizes than any of the warm-blooded mammals and birds, however, since cold blood implies that body temperature can drop to that of the surroundings and metabolism can be lowered to practical levels. The smallest vertebrates of all are therefore certain species of fish. There is a fish of the goby group in the Phillipine Islands that has a length, when full grown, of only  $\frac{3}{8}$  of an inch. I estimate its weight would be no more than 0.3 grams (−0.52) which, as you notice carries us into the negative logarithms.



What about invertebrates?

Well, invertebrates, having no internal skeleton with which to brace their tissues cannot be expected to grow as large as vertebrates. Only in the water, where they can count on bouyancy, can they make any sort of decent showing.

The largest invertebrates of all are to be found among the mollusks. Giant squids with lengths up to 55 feet have been actually measured, and lengths up to 100 feet have been conjectured. Even so, such lengths are illusory, for they include the relatively light tentacles for the most part. The total weight of such creatures is not likely to be much more than 2 tons (6.26).

Another type of mollusk, the giant clam may reach a weight of 700 pounds (5.50), mostly dead shell, while the largest arthropod is a lobster that weighed in at 34 pounds (4.19).

As for the land invertebrates, mass is negligible. The largest land crabs and land snails never match the weights of any but quite small mammals. The same is true of the most successful and important of all the land invertebrates, the insects. The bulkiest insect is the Goliath Beetle, which can be up to 4 or 5 inches in length. I can find no record of what it weighs but I should judge that weight to be in the neighborhood of one ounce (1.44).

And the insects, with a top just overlapping the bottom of the mammalian scale carry matters downward in well-represented levels of less and less massive creatures. The bottom is an astonishing one, for there are small beetles called Fairy-Flies that are as small as  $1/125$  inches in length, full-grown. Such creatures can have weights of no more than 0.0000001 grams ( $-7.00$ ).

Nor is even this the record. Among the various phyla of multi-celled invertebrates, the smallest of all are the rotifera. Even the largest of these are only  $1/15$  of an inch long, while the smallest are only  $1/300$  of an inch long and may weigh but 0.000000006 grams ( $-8.22$ ). The rotifera, in other words, are to the shrews as the shrews are to the whales. If we go still lower, we will end considering not only man but also the shrew as a giant among living creatures.

But below the rotifera are the one-celled creatures (though, in fact, the larger one-celled creatures are larger than the smallest rotifera and insects) and I will stop here. I shall have a consideration of the sizes of micro-organisms for another article on another day, and shall add only a summarizing table of sizes.

So if we are to go back to the picture of David-and-Goliath, and consider a man a Goliath, we have some real Davids to consider—the

rodents, the insects, the bacteria, the viruses. Come to think of it, the returns aren't yet in, and the wise money might be on the real Davids after all.

*Table of Sizes*

<i>Animal</i>	<i>Characteristic</i>	<i>Logarithm of Weight in Grams</i>
Blue Whale	Largest of all animals	8.08
Sperm Whale	Largest of all carnivores	7.74
Brachiosaurus	Largest land animal (extinct)	7.65
Whale Shark	Largest fish	7.61
Tyrannosaurus Rex	Largest land carnivore (extinct)	7.13
Baluchitherium	Largest land mammal (extinct)	7.08
Elephant	Largest land animal (alive)	6.80
White Shark	Largest carnivorous fish	6.36
Giant Squid	Largest invertebrate	6.26
Crocodile	Largest reptile (alive)	6.26
Sturgeon	Largest bony fish	6.13
Leatherback	Largest turtle	5.93
Kodiak Bear	Largest land carnivore (alive)	5.86
Aepyornis	Largest bird (extinct)	5.66
Giant Clam	Largest gastropod	5.50
Galapagos Tortoise	Largest land reptile (alive)	5.35
Reticulated Python	Largest snake	5.32
Ostrich	Largest bird (alive)	5.13
Komodo Monitor	Largest lizard	5.05
Man		4.96
Giant Salamander	Largest Amphibian	4.60
Albatross	Largest Flying Bird	4.20
Lobster	Largest Arthropod	4.20
Goliath Beetle	Largest Insect	1.44
Shrew	Smallest Mammal	0.30
Bee Hummingbird	Smallest Bird	0.30
Goby (fish)	Smallest Vertebrate	-0.52
Fairy-Fly	Smallest Insect	-7.00
Rotifera	Smallest Multi-celled Creature	-8.22

# BOOKS



This seems to be reprint month for this department, and there are so many to be reviewed that we must drop our custom of listing the books at the head of the column. It would look like a telephone directory. As a matter of fact, we're also forced to abandon all attempts to forge this piece into any sort of essay with discernable form. Instead, with your indulgence, we'll ramble through the reviews.

**THE SYNTHETIC MAN** by Theodore Sturgeon (Pyramid, 35¢) was originally titled **THE DREAMING JEWELS**. Although we've elected ourself vice-president of the Sturgeon fan club, and have read almost everything he's written, this is the one exception. It was a thrilling experience reading this ten-year-old classic for the first time, and those of you who know it will enjoy re-reading it. This is Sturgeon at his most colorful, most original, most sensitive. And his attack on a story is breathtaking. Horthy Bluett, an eight-year-old foundling, is caught eating ants under the bleachers of the high school stadium, and Mr. Sturgeon is off to the races, dragging you along with him at a breakneck gallop.

**NOT WITHOUT SORCERY** by Theodore Sturgeon (Ballantine, 35¢) is a collection of eight of his earliest short stories, some of them over twenty years old. They're often clumsy and self-conscious, but what would you expect from a young writer? Yet included in the collection is "It," which racked this department up when we originally read it, and which we still believe to be the single most unique concept in the entire history of modern fantasy writing. "It" would make a great horror film, and we'd like to know what Mr. Sturgeon's agent is doing about it.

**BYPASS TO OTHERNESS** by Henry Kuttner (Ballantine, 35¢) is a collection of eight stories by the late great master who, along with the departed Cyril Kornbluth, towered over the lesser authors in the 40s and 50s. There was nothing that Mr. Kuttner could not write better than anyone else.

"The Piper's Son" was the first story to explore the social problems of telepathy, and moulded the field for all time. "Call Him Demon" is a weird, realistic painting of an alien entity in an innocent world. "Absalom" is a cruelly honest ex-

amination of the relations between a father and a super-child. "Housing Problem" is one of the most charming pieces of whimsy ever written. Won't some charitable publisher collect Mr. Kuttner's great stories in a single hard-cover volume so that we can have him on our shelves for all time, to admire and mourn?

**TRIANGLE** by Isaac Asimov (Doubleday, \$4.95) is made up of three of Mr. Asimov's early novels, **THE CURRENTS OF SPACE**, **PEBBLE IN THE SKY**, and **THE STARS LIKE DUST**. These, too, are some twenty years old, and reflect the author's marvelous youth and enthusiasm. All of us remember these busy, bustling stories from the heyday of science fiction, and will enjoy owning and re-reading them. Mr. Asimov's energy is remarkable, and especially appreciated today. With so many science fiction authors writing in a listless, lackadaisical manner, his young novels come as a welcome simoon.

**THE LOVERS** by Philip Jose Farmer (Ballantine, 35¢) is an enlarged version of the novella which shattered the science fiction world ten years ago. **THE LOVERS** came along at a time when adult readers and authors were becoming restive under the self-imposed taboos of science fiction which barred, among other things, any serious consideration of sexual themes. And Mr. Farmer and his editor became the heroes of the day.

Despite the fact that science fiction has become more sophisticated in the past decade, Mr. Farmer's novel is still a shocker, and we believe he'd have as much trouble placing it in a magazine as he did in 1952. The story holds up magnificently; its impact deriving not so much from its frank handling as from the biological verity of its theme, and the courage with which Mr. Farmer extrapolated it.

**THE BIG TIME** and **THE MIND SPIDER AND OTHER STORIES** by Fritz Leiber (Ace Double Novel Books, 35¢) are a novel and half a dozen short stories, all fairly recent. The stories are etched with the characteristic Leiber touch which is easy to admire but difficult to describe. Mr. Leiber is an author whose work seems to us to have a powerfully mordant quality, biting, corrosive, darkly acid. "The Haunted Future" is typical, as is "Damnation Morning," which quite obviously is a headlong attack on a story which Mr. Leiber could not resolve. Neither could any other author.

The novel, **THE BIG TIME**, we confess, disappointed us, despite the fact that it was voted the best of the year at the 17th World Science Fiction Convention. Originally written for this magazine's honored rival, *Galaxy*, it reflects too much of the taste of *Galaxy's* brilliant editor (now on leave of absence), Horace Gold. Mr. Gold always insisted on a meticulous

working out of all background detail, and we can recall many disputes with him when we were writing for him. Our position was that too much detail tends to dissipate the dramatic force of a story, and we feel that that is exactly what happened to **THE BIG TIME**.

**SLAN** by A. E. van Vogt (Ballantine, 35¢) is, of course, the first and most picaresque of the Esper novels, and we all remember it with reverence and awe. This department recalls going down to a second-hand magazine store in 1941 where we bought the back-numbers of *Astounding Science Fiction* (this magazine wasn't even born then) and spent a hot August weekend suffering and agonizing with the Slans.

Today it holds up amazingly well, and we were again moved by one of Mr. van Vogt's most imaginative telepathic touches which we were tempted to steal when we wrote our own esper novel. Jommy Cross, the esper hero, has finally found a sweetheart, Kathleen, also an esper. The two of them are falling asleep together, and Mr. van Vogt writes:

There was a question in her mind, and his brain answered: "No, I won't eat until I've had some sleep."

Or was that just a memory of something previously spoken?

Still he wasn't quite asleep, for a queer, glad thought welled

up from deep inside him. It was wonderful to have found another slan at last, such a gorgeously beautiful girl.

And such a fine-looking young man.

Was that his thought, or hers, he wondered sleepily.

It was mine, Jommy.

Bravo, Mr. van Vogt!

Now our space is running out, so forgive us for hurrying. **TROUBLE WITH LICHEN** is by John Wyndham (Ballantine, 35¢) author of **DAY OF THE TRIFFIDS** and **THE MIDWICH CUCKOOS** (which was turned into the remarkable film, **THE VILLAGE OF THE DAMNED**.) Mr. Wyndham, whom we've met, is a charming gentleman who writes in the typical English science fiction style: leisurely pace, easy character development, quiet conflicts, no huge excitements, but always most satisfying.

**THE EDGE OF TOMORROW** by Howard Fast (Bantam, 35¢) is a collection of seven stories, six of which appeared originally in this magazine. Mr. Fast, a contemporary novelist of tremendous stature, has taken to science fiction in his middle years, and does very well for a novice. **SO CLOSE TO HOME** by James Blish (Ballantine, 35¢) is a collection of ten of the lesser stories by this splendid craftsman. We have the feeling that Mr. Blish's forte is the novel

rather than the short story. He needs plenty of elbow room.

**SKYPORT** by Curt Siodmak (Signet, 35¢) is a conventional novel about a bubble in space, the first manned satellite, and the *realpolitik* involved in the battle for its control. **HE OWNED THE WORLD** by Charles Eric Maine (Avon, 35¢) is an odd combination of modern science fiction and Edgar Rice Burroughs which doesn't come off despite the final twist. **THE GREEN RAIN** by Paul Tabori (Pyramid, 35¢) is all about Madge McMamie, a *zafftig* Sugar Cane Queen, who gets caught in the rain and turns green. So does everything else before the fantasy ends. We didn't turn green with envy.

And last of all, **VOYAGE TO THE BOTTOM OF THE SEA** by Theodore Sturgeon (Pyramid,

35¢) who was lunatic enough to waste his genius novelizing a maladroït 20th Century Fox film. The cast, and we quote, includes:

**THE ADMIRAL—**  
was he mad?

**THE CAPTAIN—**  
would he meet the test of command?

**THE FANATIC—**  
why did he hope the world would end?

**THE DOCTOR—**  
whom did she love? Which side was she on?

We hope that at least you made them pay through the nose, Mr. Sturgeon. That's the only excuse we'll accept.

—Alfred Bester



*Dr. Lloyd was, you would think, successful enough to be satisfied, but that would be ignoring the fact that he was a reasonably normal man, with, perhaps, a little more drive than most.*

## THE VAT

by Avram Davidson

DR. LLOYD PAUSED IN THE ENTRANCE to the hat store and lit a cigar. It was a very costly cigar, it was his last, his fingers trembled very slightly. *Damn* Peter Conrad! True, he had brought his troubles on his own head, but this didn't do Dr. Lloyd any good. Maybe this time—

He went inside.

A grey-haired and heavy-set man with a drooping moustache looked up and said, "Good morning. I'll be with you shortly. . . . How do you like this one?" he asked the customer looking in the triple-mirror. This was a teen-age boy with acne and a long, thin neck, for whom nothing whatsoever was being done by a low-crowned hat with an all but imperceptible brim.

"Oh," said the boy, swallowing. "All right. I guess. Ah how much money is it?" In another moment he was gone.

The hatter said, "In my opinion the first five years of adolescence should be passed in semi-monastic seclusion. The Government ought to set up refuges on remote islands, like bird sanctuaries. Eh?" Dr. Lloyd chuckled, thinly. "If you're looking for something resembling what you've got on, I don't carry imported lines."

"Perhaps not in hats. But in knowledge—" Paused, smiled.

The proprietor, whose name was Alexis Franck, seemed puzzled. "All right . . . I don't see what you're getting after, but if it's encyclopedias—"

Lloyd shook his head, blew out expensive smoke. "It isn't. What do you know about *The Fair White Maiden Wedded To The Ruddy Man*?" And he raised his eyebrows.

Franck's face went grim. "So you're—" He checked himself. The right-hand corner of his

mouth twisted a bit. "I know enough."

"I'm sure you do. 'So I'm—'?" He waited, but Frank said no more. "Ever hear of a man called Peter Conrad?" Lloyd went on. "No? Sure not? Well, how about books—say, *The Golden Tripod*, or one called *The Twelve Keys*?" Franck's upper lip curved just a trifle, and Lloyd took a breath. "Or one called *Turba Philosophorum*?" Something flickered in Franck's eye, but he said nothing. Lloyd continued, "I've been making some discreet inquiries—"

"You've been snooping, you mean!" the hatter said, scornful. "I've had your kind around before— Oh, yes! Pickers of other men's brains, thieves of knowledge. Jackals, vultures. Well, you go on about your business, it seems to pay you well enough, by the look of your clothes and the smell of your cigar; go on away from here and leave me alone!"

He kept his voice low, but his anger was obvious. Lloyd felt the tremble begin again in his fingers, laid his hands, palms flat, on the counter. "Listen," Lloyd said, "I've gone as far as I can go by myself. We've got to work together . . ."

Something occurred suddenly to Alexis Franck, and it seemed to disturb him. "What was that man's name? Peter Conrad? Yes?"

His visitor leaned heavily on the counter.

"Conrad," he said, "Conrad had a small factory down near the freight-yards, where he made bronze-castings. A pretense, a cover-up, like your hat shop. But I tell you that I am convinced that he was capable of making gold—pure gold, the kind that they say 'smears like butter,' it's so pure . . ." His voice clicked in his throat.

"Then go back to him."

Lloyd threw back his head and made a gesture of despair. "I can't!" he exclaimed. "He's dead . . . there was a fire, an explosion, they found him in the ruins. He was a fool! I—"

After a moment, Franck said, "Bishop mentioned his name once, I think. You knew Bishop."

Lloyd denied it. "But his name keeps cropping up—"

"It would," Alexis Franck muttered. "Snooper. Jackal, vulture."

"—although he seems to have dropped out of sight. Do you—"

"Haven't seen him in years. Rogue."

"Oh, yes. I tell you, I've checked the stocks of various people who've had alchemical books . . . one dealer told me that in a trunkful from a cheap hotel, auction of unclaimed baggage, he found not only items stolen from every library around here; but a notebook in Bishop's own handwriting."

Again the spark in Franck's eye. "Haven't seen him in years," he repeated. "What kind of a notebook?"



"Records of alchemical and . . . other experiments. Not a very nice fellow. *But you collaborated with him!*"

Franck moved his lips in a snarl which framed his strong, yellow teeth. He didn't need any preaching of morality, he assured his visitor. "I wanted knowledge. Had I wanted ethics—"

Lloyd said that *he* wanted knowledge, too. "Tell you, they made *gold!*" he cried, striking the counter with his fist. He had been leaning over, now he straightened up. He no longer seemed debonair, his face was hot, and little white patches showed on his lip. "Will you work with me?" he demanded. "Or do I make discreet phone calls exposing your indiscreet—"

"Vulture. Jackal."

"You mean, 'Yes'?"

Franck grimaced, shrugged his lack of choice. He moved to lock the shop door, gestured the way into the back. Lloyd followed him through a wilderness of hatboxes, down a flight of steps, into a whitewashed cellar. "By the way," Franck broke silence, "have you any other partners?"

Lloyd smiled slowly, recognizing familiar equipment: alembic, pelican, athenor . . . Abstractedly he said, "The fewer involved, the more to each share."

"Share? Oh—I suppose you mean gold."

Lloyd asked what else he could

mean. Franck paused, turned to face the other man. "For thirty-odd years," he said, "I have carried on my researches here in practical alchemy . . . or, rather, certain aspects of it. The field is a vast one, infinitely vast. Money hasn't tempted me, fame hasn't beckoned to me, defeat and failure have not discouraged me, and success has not distracted me."

But his new partner seemed not to care very much for those observations. His eyes had gone past the speaker. "What's in there?" he asked, gesturing. "Up the ladder—"

"In there is where I do most of my work on the alcahest. But it is far from completed."

Lloyd walked over to the side of the vat. "The alcahest? Oh, yes . . ." He climbed the few rungs of the iron ladder. "For a moment I couldn't think . . ." He peered over the top of the vat. "'Alcahest' is another one of the names for the Philosopher's Stone, isn't it?"

"No," said Franck, "it's another one of the names for the Universal Solvent." He put the heel of his hand against Lloyd's crotch and pushed up, swiftly and powerfully. There was a splash.

He reached the top of the ladder and peered in, just in time to see the last of Lloyd disappear like a long fade-out in an old-fashioned movie.

Franck sighed. "So many years

... so much work . . . so many interruptions . . . no wonder it is so far from complete, and dissolves only organic matter. Sometimes I am tempted to venture into the realm of the philosophical alchemists, and say that only Death itself is the Universal Solvent . . ." He sighed again, looked into the tank's shimmering liquid. Then he slowly climbed down.

"Drain and sift," he muttered, opening a valve. "Drain and sift is

the way it goes. Teeth / fillings, shoe nails, coins, keys. Sometimes I wonder if it will *ever* consume the inorganic. Of course, if it does, it will eat through the vat and perhaps consume *me* . . ." The fluid gurgled placidly. "Oh, it's a weary quest indeed, but at least I'm not spending my time seeking the Philosophers' Stone. Gold-grubbers!" he said, with infinite disdain. "Snoopers! Vultures! Jackals!"

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### ***Through Time And Space With Ferdinand Feghoot: XLIV***

In 3964, Ferdinand Feghoot was summoned to Mikimoto, the world of intelligent pearls—round, glowing, crablike creatures who spent the first part of their life-cycle inside oysters. They had adopted English some centuries before, and were all highly cultured.

"Please assist us," begged their Queen. "We have lost Michael, our most eminent Doctor of Laws. He felt himself an outcast from birth, for his mother had committed our one unpardonable crime: she ran off with a sand-crab. Poor Michael had a hideous disfigurement. He bore the marks of rutting in sand-beds—sand grains embedded all over him. In spite of his splendid career, it preyed on his mind. Yesterday, he jumped into the Vinegar Sea, our burial place and favorite spot for our suicides, since it slowly dissolves them away. We cannot enter it. Nor would we know how to find him among all the bodies."

Feghoot asked for directions, and departed at once. Within the hour he returned, bearing the chastened but now happy Michael, at last aware of the esteem and affection in which he was held.

"So soon!" cried the Queen. "How did you find him? Didn't the vinegar fumes fuddle your brain? How did you even remember?"

"Lustrous Lady," answered Ferdinand Feghoot, "as I waded through the Vinegar Sea in my sensitive bare feet, I just sang to myself, *A gritty pearl is Michael, LL.D.*"

—GRENDAL BRIARTON (*with thanks to James J. Davidson*)

*Beginning a two-part novel of war and the soldier of the future . . . a subject covered before in these pages—notably by Robert A. Heinlein in “Starship Soldier”—but which is always fresh and intriguing in the hands of a writer with a point of view and an adventurous imagination. . . .*

# NAKED TO THE STARS

*by Gordon R. Dickson*

## CHAPTER ONE

THE VOICE, SPEAKING OUT OF the night blackness around the third planet of Arcturus, under an alien tree bent and crippled by the wind, paused, and cleared its throat.

“. . . ahem,” it said. “Gentlemen: . . . it’s this way with the soldier. What makes the soldier different from the common, garden-variety murderer is the cause for which the soldier kills—” The voice broke off to clear its throat.

“Bull!” said another voice in the wind-dry darkness.

“In a war,” continued the first voice, unheeding, “to defend his hearth and family, for a crusade, during a definite, limited time—the shield of high purpose and the feeling that his cause is just may be kept clean and bright. But soldiers become veterans—”

(The voice broke off again, abruptly, on a sort of liquid cough. It cleared its throat with effort, and continued.)

“—become veterans. And veterans become professional military men. So while it may remain a fine thing to let the enemy attack before the soldier fights, it becomes the practical thing to attack first himself. . . . When this happens, the aforesaid shield of high purpose, the heretofore unsullied escutcheon . . . ah . . .” the voice hesitated in its impersonal tone of dictation, stumbled, and muttered off into nonsense.

“Throw another nerve block into him, Joby,” said Section Leader Calvin Truant, of the 4th Assault Wing, 91st Combat Engineers, Human Expedition against the Lehaunan.

“If I do,” came a voice from

beside the lecturing one in the darkness, "I'll shove both thumbs through his spine. It's had it."

"Do it now," said Cal. There was a rustle; and the murmuring voice broke off with a light gasp. There was a moment's silence, which seemed somehow unnatural, then the voice spoke again.

"—With regard to the present situation with the Expedition, I can only report it as bogged down from a Contacts Service viewpoint. Normally, at a time of truce we would expect to make considerable contact. However, it is by no means clear the Lehaunan regard a truce as we—"

"Get back to the cable phone, Tack," said Cal. "See if Division hasn't got any orders for us yet."

"Right," said another, younger voice.

There was the sound of someone moving off quietly along the side of the little hollow where they all lay, toward the eighty-three other men of what still called itself the 4th Assault Wing. In the nearly opposite direction, up the slope of the hollow, there was a faint glow in the night sky, a reflection of lights in the valley beyond where the small community around the local Lehaunan power center was. The glow would have been invisible to any but men who had had no other illumination for the past hours, since the great orange orb of Arcturus had set.

". . . nor do they think of war

in the same sense as we do, apparently. Although evidently capable of defending themselves with great skill and effect against any powered attack, the Lehaunan appear largely ignorant of the idea of individual angers or hatreds. It seems almost as if they look on the weapon that kills them as somehow not connected with the soldier who fires it. Under conditions which were not those of war, possibly these would be a kindly and naive people . . ."

"You tell'em, gutless wond—" the exhaustion-hoarse voice of Joby broke off on a slight note of embarrassment like that in someone caught suddenly speaking of the dead—"Contacts Man," he amended.

There was a sound from behind, along the slope.

"Section?" It was Tack's young voice.

"Well?" said Cal.

"No orders from Division."

There was a moment of total silence. Even Assigned Officer First Lieutenant Harry Runyon had paused in the dictation of his delirium-horn reports to superiors.

"How about the other?" said Cal. "They pass along the word to Medics we've got a basket case here?"

"Sure, Sec. But they said no beamed-power equipment to be used for fear of the Lehaunans' blowing it up. Period. Including ambulances."

The rest of them could hear Joby spit, back in the darkness.

"Thought you were the one didn't like Contacts Men, Joby?"

"And your sister," said Joby. "He's attached to our outfit."

"Cut it," said Cal.

His own words came to his ears sounding unreal quiet and distant. He was a little surprised to hear them—it was like somebody else talking. The feeling was part of his general sensation of being without a body—and which he knew was a lightheadedness from lack of sleep. He had not slept for one, two days now. Not since Lieutenant James, the last combat-commissioned officer had been taken off by ambulance. Lt. Runyon, of course, being a Contacts Man and not even allowed to bear arms, did not count.

"Tack," said Cal, "up top and take a look."

There was the sound of a quiet slither, going up the slope toward the city-glowing sky at the top.

"Truce was up at sunset," said Joby. The Contacts Man had fallen silent again. Perhaps he was mercifully dead. Neither Cal nor Joby moved to find out.

"Get Walk up here," said Cal. Joby went off, back toward the eighty-three men. Left for a moment with no one to know what he did, Cal felt a sudden, almost drunken desire to lie down. He pushed it away from him. There was sound and Joby spoke.

"Here we are."

"—What's up, Cal?"

The second voice, that of Section Leader Walker Blue, had a quality and tone something like Cal's. It was not the same sort of voice in an ordinary sense, being deeper, harsher, and more clipped. But there was something in the phrasing, in the breathing, that made it almost identical to Cal's, as it might be between two brothers.

"Tell you as soon as Tack gets back down here," said Cal. They rested in the darkness. Harry Runyon had taken up his muttering once more, but now in too low a tone to be understood. Joby spoke.

"You guys ever get the urge?" he said.

They thought about it for a moment in the dark.

"You mean Earth?" said Walk's voice. "Stay there? Go civilian?"

"Yeah," said Joby.

"I thought of it," said Walk. "I thought of it. At the end of every Expedition I think of it. But I'm not built for it. When I get rich and they shovel me under there'll be the slow drums and the trumpets. Not some damn civilian organ in a mortuary."

Cal listened without saying anything.

"Lanson went back," said Joby. "No new coat of varnish for him this trip, he said."

"Y' I know."

"He's a Congressman from South McMurdo."

"Kerr went in business back there. Deep-sea farming off Brazil, someplace. Guess he did all right."

"Nah," said Joby. "He got himself another coat. Hundred twenty-seventh Armor Assault Group. Section in Ballistics told me."

"Well. And he liked it. I got a letter—"

"After a while, I guess."

"—we must," said Runyon, strongly and suddenly out of his muttering, "distinguish. The one from the other. The innocent from the guilty. The defenders from the attackers. The, dear sir, if you will refer to my previous report . . ." He trailed off into mumblings.

"Lots like him back home, now," said Walk. Cal could imagine the sudden flash of white teeth in Walk's lean face as he said it.

"You mean Runyon?" said Joby.

"Him."

"Don't know why the ex-Services people in Government don't put a stop to that," said Joby. "All the good men and women we lost against the Griella. Now against the Lehaunan. And they train these sops to turn right around after the peace is signed and do their best to give it back again. Who'n hell has to make friends with aliens? We can lick them, can't we?"

"Civilians got to make friends," said Walk. "Just civilians."

"We got ex-mulebrains in Government. What's wrong with them?"

"Too many fat little civilians around them."

"No," Cal heard himself say in the distance. "The ones who crack their varnish and quit always were half-civilian anyway. I'm with Walk."

"It's us should go back," said Walk. "After we fix the Lehaunan. Up ship, the whole Expedition, and go back together."

"And fight the Pentagon?" said Joby.

"Pentagon'd be on our side."

"Then why don't they order us back?" said Joby. "What the hell, you, me—any of us; we go back there and how do we stand—"

"—Only young men ought to fight wars," said Runyon suddenly and clearly from the darkness, "to reduce the tax burden, and—"

"I mean," said Joby, raising his voice over Runyon's, "I go back. All right, I've got my own vote plus one extra for being a veteran. I got veteran's bonus points for tests for any Government job. I got land option and combat pension. Why fight? I ought just be able to take over."

There was a moment's silence during which Runyon muttered about nothing being more certain than a soldier's Death Benefits.

"No," said Joby, himself, heavi-

ly after a moment. "I guess not. Not worth it. We can sweat the gutless wonders out, I guess."

"Nuts," said Walk. "You were right the first time. It's up to us. One of these days we're going to do it, too."

A sound of slithering descent. "Sec?"

"Here," said Cal.

"Well," said Tack's voice in their midst, "it's still going on. I sat up there with Djarali and watched one myself. Something like a truck and one comes out of the hill into that walled compound at the far end of the town, about once every twelve minutes. Djarali says he's counted nine more since he went on sentry; and he hasn't seen any go back."

"And the truce quit at sunset," said Joby.

Cal stood up. He looked back through the darkness to where the eighty-three men were. In his mind's eye he saw the heavy equipment and weapons back there, all parked and idle with the protection of a little rise in the ground between them and the men.

"Walk," he said. "Go back and get on that cable phone. Tell them I'm asking for orders—from the General, if necessary. And tell them if they can't get an ambulance up here, they can at least get a runner in here with some drugs for Runyon. Joby can't go on giggling him with a nerve pinch forever. Tacky—"

"Right here, Cal."

"Got your sketch pad and punk with you?"

"I got a pocket kit."

"All right. Keep that." Cal began to unclip his weapons harness. "Get out of your other gear. You and I are going for a walk, down into that town."

"Down among those Lehannan?" said Walk.

"That's right. You're in charge until I get back. I'm going to try and find out what those trucks, or whatever they are, are bringing in. . . . Ready, Tack?"

There were a few more clinks from Tack's direction, and then the sound of a dropped harness.

"All ready. . . . But, oh, Section Leader, sir," Tack's voice scaled up in bad mimicry of a high-voiced recruit, "isn't this one of those volunteer missions—"

"Shut up," said Cal. "You're to stick close and not play any games. Walk, give us three hours to get back. After that it's all yours."

"Right. *Have fun.*"

"Oh, we'll have a ball."

Cal led the way off up the slope, hearing Tack close at his heels.

## CHAPTER TWO

In the Lehannan town, once Cal and Tack got into it, there was plenty of light. It came from tall, glowing, barber-pole affairs that were the local equivalent,

evidently, of street lights. They cast a dim but, to human eyes, rather garish glare over the rounded buildings and small protuberances that looked like half-barrels sticking up out of the pavement between the buildings. Cal took his way from sight-to-sight, since there were no true streets but simply spaces between the buildings, and he had not dared bring even a compass. He was fairly sure he was proceeding as directly as was feasible through the town to the compound against the hillside beyond; but it was slow going, and after fifteen minutes or so of threading his way between the buildings, he sat down on one of the half-barrels and waited for Tack to catch up.

There were two barber-pole style streetlights in this particular space—one about fifteen feet high and three feet in diameter, the other about eight feet high and two wide. Both glowed with a crackling, hard, amber illumination. It hurt the eyes to look directly at them; but for all their size, the light they threw on the curved walls of the buildings thirty and fifty feet away from them was little more than a campfire in the center of the same area would have provided. A couple of the adult, sooty-furred Lehaunans passed in opposite directions through the space while Cal sat there, but paid the humans no attention.

What was delaying Tack was a young Lehaunan, looking like a black-furred raccoon about three feet high, who had apparently become fascinated by Tack's sketchbook and pencil and was tagging inquisitively after the human. In the weird glare from the barber-poles they made a humorous looking pair—the young Lehaunan like a human child encased in a halloween costume, shoving close to the fresh-faced young man in the dirty coveralls. Tack had let himself be worked upon to the extent that he was actually drawing pictures for his small pursuer.

"Hurry it up," said Cal, numbly.

"Be right with you, Sec," said Tack. He made a few steps toward where Cal was sitting, then paused to add a few more lines to the sketch he was making at a rough distance of three inches under the curious orange nose of his companion. "He's cute. Y'know?"

"I know," said Cal, under his breath. He had started thinking again, however, about Walk Blye, and his mind slid off at a tangent. There was a danger, there.

Walk had a streak in him. He was like a wolf the Wing had once raised from a cub and tried to keep for a mascot. Until it went berserk in its fifth year and had to be hunted down with fire rifles, out in the boondocks back of camp. The wolf had been perfectly like a dog in all respects but



one. He would press against your knees, shoving his head forward as you petted him—and then, suddenly, there would be something like a light touch against the back of your hand. And suddenly, all at once, blood would bead up along a thin line where he had slashed you. But when you looked down again, there he was still pressing against you and begging to be petted.

With Walk, it would come out in words.

“—Right,” he had said as Cal and Tack were leaving. *“Have fun.”*

Cal had been twenty feet up the pitch-dark slope after answering before it registered on his ears that the last two words had not been said in the usual tone of rough and friendly irony—but on a driving note of bitter, sneering contempt. As if Cal, instead of taking off on a risk mission, had been dodging out to enjoy himself. Like the wolf, Walk had slashed without warning; and from a long time back Cal knew this to be a sign that something was eating at the man. The bitter part was that he was also Cal’s oldest friend. They had saved each other’s life before this, and might well again.

Cal looked up, impatiently. Tack and the young Lehaunan were still twenty feet from him, still immersed in their game. Cal

got heavily to his feet and stalked over to them.

“—a bunny rabbit. See?” Tack was pointing at a sketch he had drawn and put in the young Lehaunan’s hand. “See the ears? Bunnyrabbit. Say—*bunnyrabbit.*”

“Burr . . .” said the young Lehaunan. “Burra . . . brrran . . .”

“All right,” said Cal. “That’s enough.” He cast a quick glance around; but there were no adult Lehaunan in sight. “Out!” He took two steps forward and cuffed the young Lehaunan sharply. “Get out of here!”

The young one cried out, and fell back a few steps, still clutching the paper with the sketch. He whimpered and looked at Tack.

“Sec!” said Tack.

“Shut up!” snarled Cal. He took another step toward the young native, who hesitated—then held out the paper shyly toward him.

“Burraba . . .” said the little Lehaunan, uncertainly.

“Get!” barked Cal, striding forward. The young Lehaunan cried out and scuttled away into the further dimness beyond two of the houses.

Cal looked around, sweating. But there were still no adults in view. He let out a relieved breath. He had been dull-witted with exhaustion a moment before; but now he felt as if he had just taken some powerful stimulant. He was

wide awake. He turned around and led off once more.

Tack followed. Cal could feel the younger soldier's resentment like a hand laid against Cal's back.

"Listen to me," Cal said, without slowing down or turning his head. "You're carrying that sketch book to put down military information about this town. Not to play games with. And just because the Lehaunan let us walk around their town as long as we aren't carrying any power equipment, doesn't mean they're harmless. You saw what happened to Runyon when he went up to one yesterday just wearing a recorder—and the truce was still on then, too." Cal paused. There was no answer. "Do you hear me?"

"I hear you," said Tack, behind him.

"All right." They walked on. "And if you're wound up because I had to slap that kid back there, just remember that good military practice—the *smart* thing to do—would have been chop him over the ear and hide his body someplace safe so he couldn't go tell the wrong parties about what we're doing here."

Tack said something Cal could not catch.

"What's that?"

"I said," muttered Tack, "I could've chased him off without hitting him, if you'd told me."

"I shouldn't have had to tell you."

They went on. After about five more minutes, they came to the wall of the compound where the trucks had been seen. They walked it from end to end. But there was no way to get over it without equipment they had not dared bring; and no way through it but a pair of high, locked gates. Tack made a number of sketches; but in the end they were forced to turn away without learning anything.

"We could try up around the hill, from behind," said Tack.

"No time," said Cal. He looked at the timepiece set in his wrist scope. "Five hours to dawn. Come on back to camp."

On their way back through the town, they did not see the little Lehaunan again.

"Sec?" said Joby's voice as they came down the slope near the cable phone and the waiting men.

"Joby?" said Cal. "How come you're here? Runyon get rich?"

"No, he's still alive. A tech-nurse made it in from Division on her own two feet. You know that Lieutenant Anita Warroad that came out with the replacements, last month? That little brunette?"

"No," said Cal. "She bring drugs?"

"Yeah. She's got him back knowing where he is—"

"Any news from Division?"

"That's what I've been going to tell you," said Joby. "There was a

directive to all units from General Harmon, over the cable phone. All area commanders, pending further orders, to take what action they consider individually necessary to hold their present positions."

"Yeah," said Cal, softly, under his breath.

He stood for a second.

"All right," he said, raising his voice. "Everybody in here where I can talk to them. Get them in, Joby. Where's Walk?"

"Here," answered Walk's voice, so close at hand it was startling.

"Want to talk to you."

He led off into the darkness. He could hear Walk following. After a dozen steps or so, he turned and stopped. Walk's steps stopped.

"That order," said Cal, in a voice pitched low. "It leaves things up to me."

"It does that," said Walk, without expression.

"Have you got any suggestions?" said Cal, after a moment.

"It's your show."

"That's right, I guess. It is my show. All right," said Cal. "Come on back." They went back to the cable phone.

"Joby?" Cal asked the blackness.

"They're all here," said Joby.

"All right. Section units," said Cal. "Sound off—One?"

"Here," said a voice to his left.

"All present, accounted for."

"Two?"

"Here."

"Three?"

"All here."

He went on down the list. All six sections, from A to F were there. Eighty-five sound men grouped invisibly around him.

"Right, then," said Cal. "You all know how we stand. The truce was up at sunset, according to Division. At dawn, the Lehaunan in that town down there will probably be hitting us—especially since they seem to be getting reinforcements or supplies from somewhere underground into that walled power center back of town. If we wait until dawn, they've got us. If we hit them now—considering they don't like to fight at night—maybe we've got them."

He paused. There was no sound—from the men or from Walk, only a few paces from him.

"So that's what we're going to do. Hit them now. Harness up with hand weapons, fire rifles, only. In five minutes, we're moving out by Sections. We move in skirmish order right to the edge of town, and when I signal we go in shooting, and fight our way into that compound. That's all. Section Leaders to me."

The leaders of the Section units—in some cases they were not even Squadmen, so reduced was the Wing now—gathered about Cal for their individual orders. As soon as he had disposed of them, Cal went in search of

the nurse who had walked into take care of Runyon. He found both of them in the anonymous patch of night under the wind-bent tree.

"Nurse?" he said, peering into the obscurity. "Lieutenant?"

"We're over here, Section Leader," said a young woman's voice.

"You know me? Have I met you before?" said Cal.

"You came into Medical HQ about your ambulance liaison, last week," was the answer. Cal nodded to himself. He remembered her now; an almost tiny little girl with penetrating brown eyes. There had been a shift in ambulance assignments to the field units and she had seen to it that he was put in touch with his new driver.

"I remember," he said. "Lieutenant, we're moving up—all of us. You'll be left here with the Contacts Officer; I can't even spare you a man for the cable phone. But if you sit tight right here, you'll be okay. Division'll have an ambulance out at dawn—"

"Cal—" It was Runyon's voice; weak, but no longer delirious. "You aren't going to attack that town."

"If you want, Lieutenant, we can move you and Lieutenant Runyon back to the cable phone—"

"Cal," said Runyon. "Cal, listen. They don't think the same

way, the Lehaunan. Not like us. I'm sure they think a truce is good until daylight the following morning—"

"Sorry," said Cal. "But the outfit is a sitting duck for a morning attack from that town, Lieutenant. Now, Nurse—"

"You can't do this!" cried Runyon, feebly.

"What do you know about it, gutless wonder?" exploded Cal suddenly, spinning around toward the blackness of the ground from which the Contact Officer's voice had come. "You got a theory for the situation? Well, stuff your theory! Chew on it and use it instead of a backbone, you—"

"Section Leader!" it was the Nurse-Tech. "This man is badly wounded! And he's officer rank, as—"

"And I'm in command here!" Cal swung in her direction. "Remember that. Both of you. It's a combat area, my Wing, and my responsibility. So do what I tell you and save your breath for the brass back at Headquarters!"

He turned and strode away.

"Cal—" It was Runyon behind him, calling. "Cal—"

"Walk?" he said, halting at the gathering spot, some fifty feet away. "Section Leaders?"

"Here," answered Walk. And the unit leaders also answered. Over their close, low-pitched voices, he could hear the distant voice of Runyon, still weakly call-

ing in spite of the Nurse's attempts to quiet him.

"All right. Moving out—" Cal led off up the slope into the darkness, and toward the distant, sky-reflected glow.

. . . And it was then that his memory began to fail him.

What followed came back to him afterwards as a series of disconnected incidents, like a badly edited film.

—They were spread out in a skirmish line and going down the slope on the far side of the hill. The nighttime city was distant, small, and amber-colored before them. The slope was steep and he could hear men losing their footing with the weight of their equipment and the fact they could not see where their feet were stepping, and sliding noisily on down through the gravel and weeds on all sides, for some distance before they could dig in their heels and elbow to stop.

"Keep close! Keep them together, Sections!" Cal kept calling; and one desperately exasperated unit leader's voice finally coming back:

"How can I keep the sonsabitching sonsabitches close when I can't even keep my own sonsabitching self in line?"

A near-hysterical howl of laughter burst out suddenly off to Cal's right; and was cut off again, as suddenly as if the laughter had

been abruptly choked into silence.

—They were spread out still in a skirmish line, moving up through the level ground of cultivated fields to the town's outer ring of illumination, and waiting for Cal to blow the whistle that would signal the attack.

"Cal," it was Walk's voice, suddenly and eerily out of the night almost next to Cal's ear.

"What? What're you doing here? You're supposed to be bringing up the rear!" said Cal.

"I'm going back there—in a minute," said Walk. "I just wanted to see were you still with us. Or had maybe sat down for a smoke someplace."

Cal opened his mouth. Then closed it. He took a slow breath and spoke carefully.

"Get back to your position."

Walk laughed; and his laugh went away behind Cal. Cal continued on at a normal pace. When he was ten feet or so from the outer ring of lights, he put the whistle to his lips and blew.

Yelling and running, the human soldiers—looking clumsy and awkward in their harnesses and equipment—burst forward into the glare, black against hard amber illumination, dodging between the dome-roofed buildings, the fire rifles spitting little pale ghosts of flames from their muzzles.

Cal found himself yelling,

too . . . running, and his gun was leaping in his hands.

—It had all taken on the air of a carnival, of a pigeon shoot. There was hardly a sputter of opposition. The humans were running between the buildings, calling out to each other. Keeping score. Making bets.

Black furred bodies lay between the buildings. Half in and half out of triangular doorways. The barber poles had holes shot in them, but continued to spread light. The buildings had holes in them.

—They were at the gates, the locked gates of the compound. They had shot the locking mechanism to ribbons but the gates themselves refused to open. Some of the men were cheering and rocking one of the taller barber poles. It teetered. It leaned farther . . . farther . . . and fell. Men scattered, cheering.

It bounced as it hit, like a great rubber toy. It came down again, knocking over a soldier who had not run fast enough. It rolled off one of his legs, leaving it badly angled upon the pavement.

The men howled with laughter. Joby, who was standing nearby, went into a fit of rage.

"Why don't you look where you're standing?" he raved at the fallen man. The man, who had been laughing with the rest,

stopped suddenly and burst into shamefaced tears. Walk yelled at the others to pick up the barber pole. Twenty of them grabbed it.

It was light. Cal found himself holding it nearest the front. Holding it like a battering ram, they ran at the gates. The gates shivered and sagged; and the barber pole rebounded so springily they almost dropped it.

"Again!" yelled Cal. They ran at the gates again. They burst them open and spilled into the interior of the compound. Inside there were Lehaunans with guns who began firing immediately.

—They were past the Lehaunan with the guns. There had only been a handful of them. The humans were swarming over the truck-like devices. By main strength, a cover was torn off one of them, revealing a load of rock.

"Ore!" shouted somebody. "Ore cars!"

The men howled like disappointed wolves.

Cal stared.

Under his feet there was a feeling suddenly as if the ground underfoot, and all the universe attached to it, slipped suddenly and rocked, and he . . .

—He was sitting on one of the protuberances in one of the open spaces between the dome-like buildings. Dawn was washing a pale yellow-pink light over his

surroundings; and a small, cool wind moved about between the buildings and ruffled the black fur of a Lehaunan fallen about twenty feet off. It moved on to blow through the sooty body hair of another, dimly seen fallen farther on inside the open entrance to one of the buildings.

A young Lehaunan like the one he had cuffed yesterday was tugging and murmuring over the still body just inside the entrance. He caught sight of Cal and for a moment his orange nose projected inquisitively beyond the doorway in Cal's direction. Then it was pulled back inside.

Cal sat looking at the wind playing in the fur of the dead one closest to him. He thought of the youngster he had just seen, and his fingers twitched automatically about the rifle lying across his knees; but that was all. He went back to watching the movements caused by the breeze in the fur. . . .

There was a noise close by him. A voice.

He looked slowly around. It was the young Lehaunan from the doorway. He was holding a grimy piece of paper out to Cal.

"Burraba . . . ?" said the young Lehaunan, diffidently.

Cal stared at the scarcely recognizable sketch of a rabbit on the paper.

"Burr—abbut?" said the young Lehaunan.

There was a coolness on Cal's face in the blowing wind. He put his fingers to chin and cheek and they came away wet. He was crying.

"Bunnrra-abbut?" said the young Lehaunan, hopefully.

### CHAPTER THREE

The next thing Cal became conscious of was that he was in a hospital ship with a bad leg burn, such as might have been made by his own fire rifle. The ship took him all the way back to Expeditions Base Headquarters at Denver, Earth, for hospitalization. He spent three months in the hospital, at the end of which time he was released with a Star Cluster added to his medals list and a field promotion to Second Lieutenant. He vacationed around the home world for some weeks, visiting his few relatives and some old buddies now settled back on Earth. But the end of March found him once more back at Expedition Base HQ, outside the Recruitments Office.

A chinook—a warm, dry wind off the slopes of the surrounding mountains—was blowing down the company street where he stood, melting the snows of a late spring fall. The moving air felt cool on hands and face, but the sudden rise in windy temperature was making him uncomfortably warm inside his uniform jacket

that felt strange on him after these months of civilian clothing.

Isolated in the west of the brilliantly blue sky, the clouds had piled high into a great, toppling white castle-shape; but, as he glanced at it, the harrying wind ripped among it and tore it to fragments fleeing over the ram-parts of the mountain tops. Cal's head was dull from a slight hang-over. He touched his fingertips to the row of medal ribbons on his lapel, and went inside.

The Section Leader who took his application punched for Cal's records, and when they appeared imaged in the filmholder on his side of the counter, looked them over carefully.

"I'm sorry, Lieutenant," he said, at last. "But I can't sign you up."

Looking across the counter, Cal suddenly identified the look he saw in the man's eyes. It was the same look he had noticed on the face of the Medical Officer of his hospital ward; and it had been in the gaze of the Administrative Services clerk who had made out his release papers. He had seen it even in the eyes of Annie—Lt. Anita Warroad, the Nurse-Tech with Runyon among the Le-haunan—whom he now knew well, and who had just been down from Medical Research at Fort Lupton to spend the weekend with him.

"Can't sign me?" said Cal.

Across the room behind the barrier of the counter, a desk printer began to turn out copies of some manual with a faintly thumping flutter. The sound echoed inside Cal's lightly aching skull and slightly queasy stomach.

"I'm sorry, sir. You haven't been through Psych."

"Psych is optional."

"Yes, I know, sir. But in your case here, the releasing Medical Officer seems to have recommended it as a condition for reservice."

"I was discharged," said Cal, "on a leg burn. Just a leg burn."

"Yes sir. But the MO can recommend Psych at discretion."

"Look," Cal leaned on the counter. "I just had a leg burn and the skin graft took perfectly. I'm in top shape, now."

"Yes, sir."

There was a moment of uncomfortable silence.

"There must be some mistake in Records. Could I see your commanding officer here, for a moment, you suppose?"

"I'll see, Lieutenant."

He left. A few minutes later he came back and led Cal through the barrier to an office and a seat across a desk from Colonel Haga Alt—who Cal remembered as General Harmon's aide on Le-haunan.

"Sorry to bother you, sir," said Cal.

"I was just waiting for General Harmon to finish some business.



We're updating equipment. I've got a few minutes, Lieutenant." Alt was a dark-haired wiry man in his early forties, a little shorter than Cal. "You were Combat Engineers on Lehaunan?"

"Yes sir." Cal's found his back stiffer against the back of the chair than he liked. He made an effort to relax. "Fourth Assault Wing."

"I remember. They gave you a Star Cluster for taking that power center town in the hills. A good job."

"Thank you, Colonel. Not necessary, as it turned out, though—taking that town."

"*Not necessities* are usually our main job, Lieutenant. Cigaret?"

"No thank you, sir." Cal watched Alt light up. "The Section Leader outside there—"

"Yes." Alt took the cigaret out of his mouth, fanned the smoke aside and leaned forward over the filmholder set in his desk. He studied its screen a second. "Yes." He sat back in his chair, which tilted comfortably and creaked in the little stillness. "There's no point in pussyfooting about this, I think. Your releasing officer apparently considered you possibly damaged psychologically. At the moment it's an expert guess, nothing more. We can run you through Psych and find out."

"Yes sir."

"Well?"

"I understand," said Cal, care-

fully, "that the digging around that's done in Psych to find out if there's something wrong sometimes triggers a difficulty that wasn't there to begin with."

"True enough. In something like eight per cent of cases, I hear."

"Colonel," said Cal, and took a deep, if quiet, breath. "Would *you* like to bet your career, sir, on even twelve to one odds, when you knew it was really not necessary?"

"Lieutenant," replied Alt. "I would not. And what's that got to do with the situation?"

Cal let out the breath he had taken.

"Nothing, I guess, sir," he said dully. He waited for Alt to dismiss him. But the other man sat instead for a moment, staring hard across the desk at Cal.

"Hell!" he said at last; and shoved his half-smoked cigaret down the disposal in his desk. "Would you like to tell me your version of why you think that psych-hold is on your record?"

"Yes, sir." Cal looked straight across the desk at him. "I've got some areas of amnesia during and following the attack in which I was wounded—that's what bothered the Medical Officer. But, by that time I'd been in sole command of the Wing for nearly sixty hours and without sleep for that length of time. My outfit at the moment was under combat pres-

sure and in an untenable position. The truth is, I was just out on my feet from exhaustion, for those periods."

"I see." Alt looked at him hard for another moment, then got to his feet. "Wait here a minute." He went out.

Cal was left alone in the neat, white-lighted office for about ten minutes. At the end of that time, Colonel Alt returned, followed by a tall, spare man of his own age, who strode at Alt's heels as if to the measure of silent drums. Three small gold stars shone on his jacket collar. Cal got to his feet.

"Here he is," said Alt, to the tall man. "Lieutenant," he said to Cal, "General Harmon has a suggestion for you."

"Thank you, sir." Cal found himself shaking hands. Deep-set grey eyes looked down into Cal's face.

"I read about that Star Cluster of yours," said Harmon. The Colonel here tells me you want to get back on with your Wing."

"Yes, General."

Harmon turned and strode over to the nearest wall of the office. He struck a button there and the surface went transparent to reveal a black background on which a design in white appeared.

"Recognize that, Lieutenant?"

"Yes, sir. A space schema. Our territory out towards Orion."

"That's right. You've had some command school."

"Not officer, yet, sir. N.C.O., though."

"Then look here." Harmon moved a button and a red line leaped from a center point out through the diagram. "What do you make of that?"

Cal studied it for a second.

"The pattern of our advance, sir. Since the beginning—since World Unification, at the end of the twentieth century. And as far as we've gotten with the Lehaunan, now."

"And to within forty light years of the nearest star systems in the Orion Group." Harmon looked over at Cal. "Lieutenant, why do you think we might be interested, say—" his finger indicated one of the Orion stars—"in Bellatrix, here?"

"Well," said Cal, "it's just about next on the list."

"What list?"

"Sir?"

"I said," said Harmon, calmly, "what list? What list are you referring to?"

Cal straightened slightly inside his uniform. The air in the room seemed to have lost its early, negative stillness and become warmly and electrically alive.

"No list, sir," he said. "I meant, Bellatrix would be just about the next system we'd encounter in our normal expansion into space."

Harmon nodded.

"And if we didn't go on with our normal expansion?"

Cal looked sharply at the general. But Harmon stood merely and patiently waiting.

"You can't be serious, sir," he said. "Population pressures—plus natural instincts . . . we'd be committing suicide if we didn't keep expanding."

"Really, Lieutenant? Why?"

"Why—" Cal fumbled for words and phrases long stored away, "halting our natural expansion would leave us . . . with the sort of self-emasculation that leads to racial suicide. To many people, for not enough land. We'd be bound to fall prey to internal dissention, and—we'd be sitting ducks for the first more practical-minded race that grew out into our areas of space."

"I see you studied in school. No, no—" he interrupted Cal as Cal was about to speak, by holding up one slim, tanned hand. "I'm not complaining, Lieutenant. I'm just more interested in your personal reaction for the moment. You've been in combat against the Griella and the Lehaunan. What do *you* think?"

"I think we've got to be best, General," said Cal, with suddenly a strong feeling moving in him. "That's what I think."

He heard his own words, and a warm embarrassment stirred in him—mixed with a mildly righteous sense of defiance.

"Well, Lieutenant," Harmon was saying, "that was well said. I

think you might be the sort of man to take my suggestion after all. Look here—"

"Yes, sir?"

Harmon turned back to the schema. His finger stabbed out beyond the furthest point of the red line's advance—at a small and brilliant white dot.

"Bellatrix," he said.

He looked back at Cal.

"That's the star where we're going next, all right, Lieutenant. She's got a system with two habitable worlds, and inhabiting one of them there's a race called the Paumons. A red-skinned, hairless bunch of bipedal humanoids that're the closest thing to us we've yet run across. They'll be giving us a run for our money and our lives that'll make the Griella and the Lehaunan and all the rest look like members of an old ladies' Sunday sewing circle. We're setting up the Expedition for there, now. I'm going. The Colonel here is going; and your old Wing will be there." Harmon paused and looked Cal directly in the eyes. "But—I'm sorry, Lieutenant—I'm afraid you won't be listed in its table of organization."

He paused. Beyond the open door of the office where they stood, somewhere down the corridor outside, a door slammed; and a man's voice called out to someone on a note of brisk urgency.

"I'm sorry," said Harmon, "but I've no right to risk the men who

would be serving with and under you, by asking the Medical Service to make an exception in your case."

"Yes . . . I see, Sir."

"On the other hand," said Harmon; and hit the button below the schema with his fist. The pattern winked out into blank wall again. Harmon walked briskly back to Alt's desk and looked down into Cal's face once more. "There's that suggestion I was about to make to you."

"Sir?" The word came automatically from Cal.

"General Walter Scoby, who heads the Contacts Service—as you probably know—is coming along in person on the Paumons Expedition. He was asking me the other day if I knew of any ex-mulebrains who might be interested in the Contacts Service." Harmon smiled slightly. "He's having trouble getting good men. Of course, your Psych hold applies only to the Combat Services. If you signed with General Scoby, you'd be coming along to the Paumons with the rest of us. In a non-combatant position. I, myself, would like to see men with your experience and attitudes on General Scoby's staff.—You know," said Harmon, frankly, "the gap between Contacts personnel and the people of the Armed Services is a large one; but we should try to bridge it. It would make for better results all around

on the Expedition. Well. . . . the decision's entirely up to you, of course, Lieutenant. I wouldn't want to talk you into something you might later regret." Harmon extended his hand and Cal found himself shaking it. "And good luck, Lieutenant. Cal, isn't it?"

"Yes, sir," said Cal.

"Good luck, Cal."

And then he was gone.

It was another day that Cal came across the wide, grassy, park-like mall that separated the Recruitments Offices and other Combat Services from the converted hospital buildings that housed the Contacts Service.

He had taken two weeks to face the fact that any kind of Service, for him, was better than none at all. And now, as he came across the mall, the grass underfoot was beginning to turn richly green from its brown tint of winter, and the shadow of the flag before the Contacts Offices flashed in his eye like the shadow of a stooping hawk, as it whipped in the light spring breeze.

He went up the stone steps, and inside. Behind the front door, the offices were cluttered and overcrowded, with a fair sprinkling of civilians among the uniformed personnel at the desks. Cal mentioned Harmon's name, was kept waiting a few short minutes, and was then shown in to see General Scoby himself.

Stepping through the indicated doorway, into a sudden glare of sunlight from two tall windows, Cal caught sight simultaneously of an older man at the desk and of a leopard-sized, long-legged feline of a pale, fulvous color. It was black-spotted and wore a light leather harness from which a hoop-shaped handle projected upwards at the shoulders. The large cat lay resting in a corner of the room beyond the desk; and it raised its head at Cal's entrance, which brought its eyes momentarily in line with Cal's. The yellow, guarding, animal stare caught Cal between one footfall and the next, and in that fraction of a second Cal tensed, then relaxed, and moved on into the office.

"Good reactions," commented the man at the desk. "Sit down, Lieutenant."

Seating himself by the desk as the big cat in the corner dropped with boneless gracefulness back into its half-dozed against the wall, Cal turned his glance on the man. He saw a greying, three-star general with bushy hair and evebrows, a pipe in his mouth, and a uniform shirt tieless and open at the throat. Incongruously, the black-and-white piping of the *Banner* Commandos ran along the edge of his shirt epaulets. His voice rasped on a chronic note of exasperation.

He took the pipe from his mouth and pointed with its stem at the cat in the corner.

"Cheeta," he said. "My seeing-eye beast. Her name's Limpari."

Cal looked involuntarily up into the man's eyes, for they were knowing and full of vision.

"Oh, just periodic blackouts," said Scoby. "I'm a silver-skull." He jerked the pipe stem toward his thinning scalp. "Plate on most of this side. What's your particular purple heart, Lieutenant—" he frowned at the screen of the film-holder on his desk—"Truant. Cal. What kind of disability've you got, Cal?"

"Sir—" said Cal, and stopped. He took a careful breath. "Psychhold," he added shortly.

"In other words, you'd rather never've come here to me?"

The rasping voice went in between the strings of Cal's nerves like a hacksaw blade.

"Yes, sir. That's right." Cal looked directly into the pale blue eyes beneath the bushy grey eyebrows. "As a matter of fact."

"Well, don't look at me for an excuse to back off. I need every ounce of half-way competent help I can get." He jabbed his pipestem at Cal. "All the same, it's probably only fair to let you know something of what you're getting into. You've seen the sort of stuff Contacts Officers run into in Combat Outfits. You think you can take that, do you?"

"I think so, General," said Cal, carefully. "If I have to."

"Oh, you'll have to—don't think

you being an ex-mulie's going to make all that difference." Scooby spoke almost with relish. "And then there'll be the situation with the top brass in the Combat Services. Particularly when you're in need of people, or supplies or necessary authority to get things done."

He put the pipe back in his mouth, clamped his teeth on it and sat staring over it at Cal.

"And on the other hand," he added, suddenly, "if you're not serious about this Service of mine—if you've just got some reason of your own for wanting to wear a uniform and travel along with the Combat outfits, you can probably last two-three months before I catch up with you. And if you're a real smoothie, you might even double that."

He took the pipe out of his mouth again; and said in a sudden shocking change to a tone of extreme mildness, "Fair enough?"

Cal kept his face expressionless.

"Of course, sir."

"Oh—" Scooby was back to his hacksaw voice again. He jabbed an index finger like a bayonet at Cal's shoulders. "You'll be losing those, of course."

Cal's hand made a little move in spite of himself toward the lieutenant's insignia on his epaulets.

"My tabs, sir?"

"I'm not allowed to offer rank as an inducement to signing up. You'll have to sweat out Basic

Training all over again. Then you'll get probationary status as a Warrant Officer during Combat Services School. Then be confirmed and appointed a Second Lieutenant when you're assigned to a Combat Unit as Attached Officer."

Cal said nothing.

"Of course," said Scooby, raspingly, "if it turns out you've got the guts to stick with it, you can go as high as my table of organization permits—if you want to work for it. The rank won't do you any good in the field—you'll find the lowest Section tag-end of a mule-brain you come across will figure he's twice as good as you from a standing start, because he carries weapons and you don't. And with half the toy soldiers I've got working for me and wearing a Contacts shoulder patch, he'd be right. I've been hoping somebody with your background might just come along and be different."

"Sir," said Cal, and he kept his face as still as water on a windless day. His gaze went impersonally past Scooby's shoulder. "Would the general advise me to sign up with the Contacts Service?"

"I'd beg men like you if I thought that would get them for me," said Scooby. Suddenly his voice went startlingly mild and reasonable again. "I can't spare any more body parts; but I'd gladly trade off a finger at a time for ten good officers. I mean *good ones!*"

Suddenly again, he was rasping and snarling.

"My usual gamut of recruits runs from half-baked college kid idealists through out-and-out nuts down to something not even worth stepping on. Don't rear back and spit in my eye, Lieutenant, until you know what you're spitting at. You don't make King Arthur's knights out of fat-faced potboys unless they're the son of King Lot to begin with." He glared at Cal. "You got any idea of what Francis of Assisi was like before he went to a party, one day?"

"Sir?" said Cal.

"Never mind. But you might look it up sometime. Meanwhile—I'll be glad to have you if you want to sign up. If you do, come see me after you're through Contacts School."

"Yes, sir." Cal stood up.

"And hang on to your sense of humor." Scoby turned back to his desk. Cal headed toward the door.

"Hey!"

Cal turned back. Scoby was glaring after him.

"You don't believe it," Scoby snarled, "but you and I both might end up thanking General Harmon for sending you over this way. But meanwhile—don't forget to pass on my official gratitude, if you see the General." He grimaced at Cal. "Harmon's half-Greek, you know."

"Sir?"

"Never mind. Never mind!" Scoby turned back to his work,

waving Cal out of the room. "If you ever look up St. Francis, though, you might take an extra few minutes and check on the siege of Troy. All about a horse. Never mind. Come see me when you get through Contacts School. So long, Lieutenant!"

Cal stared for a second longer; but Scoby seemed to have forgotten the very existence of any visitor. He was wrist-deep in forms and papers, looking like a seedy bookkeeper, behind in his entries. Over in the corner, the cheeta had fallen asleep and slid down the slope of the wall to lie on its side on the floor with legs stiffly outstretched. It looked like a large, stuffed toy animal.

Cal went back to the outer offices and signed up as a Contacts Service 'Cadet.' He was told to report in five days to be sent out for Basic Training.

He left the building. As he came down the steps outside, the scene was the same as when he had entered. Only now, under the hawk-like shadow of the flag, a pot-bellied Colonel in office pinks was scattering crumbs to a small horde of clamoring sparrows that fought and squabbled, shrieking, over the larger crusts.

#### CHAPTER FOUR

Four days later Cal lay on the slight slope of the sand of Hornos Beach at Acapulco, Mexico, watch-

ing Annie Warroad swimming out beyond the first crest of breakers. It was late in the morning and they had the beach almost to themselves. Also it was shark season, but the dolphin patrol was out and Annie was packing a stingaree.

Nevertheless, Cal kept his eye out for fins; and the dolphin whistle handy. Otherwise, he simply lay and watched Annie swim. She swam strongly, in a straight line, her white arms flashing against the sun-brilliant blue of the sea, parallel to the beach. She's got guts, thought Cal, unexpectedly. And felt that clumsy expression of his feelings about her followed immediately by a sudden, terrible stomach-shrinking sense of desolation and loss. He reached for the dolphin whistle without looking for it, put it to his lips, and blew one long and two short.

One of the dolphins on patrol curved aside and slid out of sight under the water to rise a second later beside Anne and nudge her toward the beach. Her arms broke their rhythm, she stopped, and looked shoreward. He stood up, waved 'no sharks' and beckoned her in. She turned toward him and her arms began to flash again.

He lay down once more, feeling empty inside. After a few moments, she came ashore in a flurry of foam, sliding up on the sand. She got to her feet, shaking her short dark hair clear of the bath-

ing cap; and came up the slope toward him, smiling. A loneliness so deep as to be almost anger moved in him. *I love you*, he said, soundlessly to himself. He opened his mouth to speak out loud. She came up to him; and he closed it again.

He stood up. Standing, he could see how small she was.

"What?" she said, shaking her hair back, looking up at him.

"Let's go get a drink," he said.

Two mornings later, after tests and outfitting, Cal took an Army transport with four hundred and sixty-eight other recruit-rated enlistees. The transport was an atmosphere rocket with the same sort of body shell that in a commercial flight would have been rated at a maximum of a hundred and fifty passengers. This one, however, locked on an extra motor and filled its interior with two double-rows of gimbal-hung seats on each side of a narrow aisle. Cal managed a seat by one of the small windows, and sat there with his view of Stapleton Field, thinking of Annie. He was surrounded by men in new forest-green uniforms, but he did not feel at home. Their voices were civilian voices. They rattled on around him about school, home, relatives, girls . . .

"—Hey, Dad! Dad!"

Cal roused himself. A nineteen-year-old face was peering down at him from between the two seats di-



rectly before and in the tier above him.

"What?" said Cal.

"Got a light?"

The transport was still on the ground. The "no-smoking" sign in the ceiling overhead was lit. But Cal saw no point in wasting his breath. He passed up a self-striking cigaret and went back to looking out the window.

A few moments later, there were steps down the aisle.

"You got a cigaret, soldier?" said a voice.

"Sure, Sec," said the voice that had hailed Cal. "Want one? Here."

"Thanks. That all you got?"

"Well—hey, that's a full box! That's all I got to last me to the Fort! I thought you only wanted one."

"Don't let it worry you, soldier. As far as you're concerned, you're through smoking for the next three months—until you get out of Basic. And if I were you I wouldn't try bumming from your friends after you get to camp. I'll pass the world along the cadre wires when we get there; and maybe your Section Leader can find a little extra something to remind you to believe in signs."

The footsteps went off. Cal tried to go back to his thoughts of Annie.

"I don't believe he has the right to do that, has he?" said a voice in Cal's right ear. Cal turned to look into the face of the man be-

side him—a good-looking, serious, tall young man in his early twenties.

"You're Contacts Service, like me—aren't you?" said this individual, seeing he had got Cal's attention. "I noticed the color code on the file you're carrying. I'm Harvey Washun."

"Cal Truant," grunted Cal.

"That's the sort of abuse of authority we're going to have to look out for when we get to be Contacts Officers. That's one of our responsibilities, isn't it—to the enlisted man, as well as to the alien?"

"That's what I heard," said Cal. He pulled his dodge-cap down over his eyes, slouched down in his seat and pretended to go to sleep. He heard a creak from the seat-belt beside him as his seat-mate shifted position—but no more talk.

Forty-eight minutes later they took off, and eighty-three minutes after that they set down at the field attached to Fort Norman Cota, Missouri. Their cadre Section-Leaders and Squadmen were waiting for them and ran the whole contingent back to the Combat Engineers Training Center, some four miles away.

It was a soft May day in the Ozarks. A puff of cloud here and there in the sky showed above the straight shafts of the poplar and pine and reflected in the puddles they splashed through—scattered here and there in the reddish mud

and gravel of their way by a recent rain. The air smelled warm and heavy and sweet. About him, Cal could hear the grunts and gasps of his fellow-trainees, as they puffed against the prolonged heavy work of the run. Cal was breathing deeply and steadily, himself; and it occurred to him suddenly that after these past months of hospital and release, he was in no better shape than a lot of them. What made it easier for him was a difference in attitude. He saved his breath for running; and his emotions for things over which he had some control.

"Close up! *Close up!*" yelled the cadremen, running alongside the stumbling, winded, folder-file and duffle-bag laden column. "Keep in line, butter-bellies! Shag it!"

Their voices struck off a faint echo in Cal's memory of his own first days in the service; and the wild sweats and alarms mixed with the tremendous excitement of feeling caught up, occasionally, in something big and vital. It had been hell—but he had been *alive*. Now, for a while, he could be alive again. The slow, sweet twinge of nostalgia lingered for a second in him.

They passed the barracks area of some trainees already in the second half of Basic, who were having a scrub-up of their barracks area; and shouts of "You'll be sorreeee!" and "Tell'm where to send the body!" floated after them.

About a third of the contingent finally pulled up, gasping and heaving like broken-winded horses in front of the white-painted two-story barrack buildings of their training areas.

A sharp-faced man of Cal's age, with the diamond of a Wing Section on the tabs of his sharply creased and tailored fatigues, came out of a small company office building and stood at the top of its three steps, looking at them.

"You shouldn't ought to bring them in before lunch," he told the Cadre Section in charge. "These muck-faces always make me sick to my stomach." Suddenly he roared. "Aten-SHUN! What's the matter with you? Can't you stand at attention?"

"Of course not!" said the Charge Section. "They're a bunch from that Denver Recruitment Center."

"Well, keep the suck-apples out of my way," said the Wing Section, "or I'll send them all off on a run around the mountain. Show them to their barracks—and see they don't get them dirty."

Silent, detached, Cal saw the men around him introduced to the white-painted buildings, and felt the wave of their exhausted relief at the sight of the mathematically perfect twin rows of bunks on each floor. He watched their feelings change to exasperation as they were put to making up their assigned bunks, storing their bags and files in foot lockers and bunk

hooks. And then, exasperation turn to silent fury as they were directed to remove their shoes and outer clothing and carefully scrub and wipe every trace of dirt, dust or disarray their incoming had produced. Finally, he saw it all give way to numb shock as they were told to take their ponchos and mess kits out into the open between the buildings and there assigned a six by three foot rectangle of earth apiece for their actual living. Because, as their Section's Section Leader, Section Ortman, put it:—

"Those barracks were built for soldiers, not pigs. We leave them there so you can have the fun of standing official inspection every Saturday morning." Then he drew a line in the air with the swagger stick he carried under his arm and informed them that this was the magic line, ten feet out from the building, and he didn't want to see any of them crossing it, except on a direct order.

Ortman was small and broad and dark. He wore the ribbons of the Lehaunan campaign on his parade jacket, and he did not smile as he talked.

Cal was thinking of Annie.

Six weeks later—by the time the contingent was ready for Advanced, the second half of Basic Training—the image of Annie had worn thin. So had Cal's memory of his first Basic. A new bitterness had taken its place.

For the first time in his years with the Service, that curious alchemy that draws a soldier close to other men in his own outfit, Wing-Section-and-Squad, had failed him. He was a man apart. To the rest of the trainees, he was a veteran (the facts were in his file—they had not taken long to leak out). To the cadremen, over the trainees and himself, he was a freak—neither true recruit nor true soldier—walled off from them by the patterns of military discipline. To the other Contacts Cadets putting in their stint, he was an enigma, lacking in the proper ideals and theories.

Washun, his seatmate on the ride to the Fort from Denver, had tried to bridge the gap.

"I've been talking to some of the other Cadets in the outfit," he said to Cal one day after chow. "And we'd appreciate it if you'd give us a little talk, sometime, and help us out."

"A talk?" Cal looked up from polishing his mess kit.

"On how to be a soldier," said Washun. Cal gave him a long stare, but the boy was serious.

"Go get shot at," said Cal, and went back to polishing his mess kit. He heard Washun rise and leave him.

Washun was one of those in Cal's squad who did not fit. Unlike Tommy Maleweksi, the sharp-faced nineteen-year-old who had bummed the cigaret from Cal on

the transport and was now after six weeks practically and effectively broken of the habit, Washun was having it harder rather than easier. Malewski had threatened to arise from his poncho swinging the first time one of the cadremen woke him—he was not one of those who are cheerful in the early morning—with a swagger stick. He had not, and was now a trainee corporal. Washun had worked hard and conscientiously at everything while obviously hating it with a fastidious hatred; but he talked too much about abstract matters like 'ethics' and 'responsibility' and was too thin-skinned for his own happiness. The cracks about 'gutless wonders' he and the other Contacts Cadets (except Cal) were already beginning to get from the other trainees, wounded him deeply. Unlike any of the others, he had already had one fight with a trainee named Liechen from Section A, over the term—had gone into the fight swinging hard and conscientiously, and obviously hating it, and emerged a sort of inconclusive winner. This, because Ortman and another Section Leader had discovered the fighters and made them keep at it until Liechen dropped, at last, from exhaustion, and could not be made to stand under his own power any longer.

As a result of this, however, Washun after his company punishment with Leichen had re-

turned to be a sort of minor hero and leader to the Contacts Cadet outcasts. Though he refused all responsibility they sought him out with their troubles—and this did not make him popular with Ortman, who thought the situation unhealthy.

"Been holding court again?" he would ask, as they stood in line for 'informal' inspection—inspection that is, of their outdoor, or actual, barracks area, which was required to be as tidy as any indoors. Cal, standing next to Washun, would see out of the corner of his eye the other man go white—as he invariably did when attacked.

"Yes, Section!" Washun would reply, staring straight ahead, suffering, scorning to take refuge in a lie.

"Washun," Ortman said wearily, one day, "do you think you're doing these men a favor? Do you think it's going to *help* them, letting them go on with the habit of having somebody around to kiss the spot and make it well? Well, answer me—no, don't." Ortman sighed wearily. "I'm not up to listening to Societics philosophy this early in the morning. . . . You men!" He shouted, looking up and down the four squad rows of the Section. "Listen to me. This is one damn Section that's going to pretend it's made up of men, even if it's not. From now on if I catch any one of you milk-babies crying on anyone else's shoulder, they

both carry double packs on the next night march. And if I see it again, it's triple packs. Get that!"

He turned back to Washun.

"Shine that mess kit!" he snapped. "Can't you get a better fit to your fatigues than that? Re-fit them! If you've got too much time on your hands that you've got to listen to bellyachers, let me know. You've got a long ways to go to be a soldier, Washun—and that goes for the rest of you."

He stepped on down the line and found himself in front of Cal. For a moment their eyes met. Cal stared as if at a stone wall, his face unmoving.

Ortman stepped on.

"You, Sterreir, tear up that kit layout, and lay it back down right. . . . Jacks, wash those fatigues and repress them. . . . Maleweksi . . ."

That evening, after chow, a delegation of five of the Contacts Cadets, lacking Washun, cornered Cal as he was leaving the messhall.

"You've got to do something about it," they told him.

"Me?" Cal stared at them. "What am I supposed to do?"

"Talk to Ortman. He's picking on Washun," said a tall boy with a southern accent and a faint mustache. "And Washun's doing as well as anybody. That's not right."

"So?" said Cal. "Tell Ortman yourself."

"He won't listen to us. But he likes you."

"Likes me?"

"He never eats you out like the rest. You don't draw the extra duties. He's all right with you because he knows you've been through it before."

"Yeah," said Cal. "And the fact I do things right's got a little bit to do with it, too. For my money, Ortman's doing just fine with Washun and the rest of you."

"Sure," said a small Cadet with black hair, bitterly. "You don't want to do anything for us. You like to think you're one of them, buddy-buddy with the cadre."

Cal looked around the group. They stirred uneasily.

"Don't get tough with us, Truant," said the tall boy, nervously. "We're not afraid of you."

Cal snorted and walked off.

The first half of Basic had been films, lectures, classes, drill and company small weapons training. With the start of the second half they moved into the barracks at last, but also field and survival training—forced marches, night movements, infiltration, and tactics problems that turned out to be endurance or escape tests. The Section was melted down from its bloated oversize of nearly three hundred men to merely double the size of a regular Section—a hundred and fifty men; the drop-outs going not back to civilian life but to the 'housekeeping' services, such as Supply and Maintenance.

Among them went all the Contacts Cadets in Cal's Section except Cal, the tall southern-accented boy with the moustache, and Washun. And with the going of these other Cadets, came a problem.

Now that the complainers had gone, Cal was forced to acknowledge that Ortman was, indeed, bearing down unfairly on Washun. It had not started out that way. But Ortman was only human; and if he had the weapon of legal authority in his possession, Washun had the weapon of martyred superiority. It had come down to a contest between them.

It was a war of the spirit, with each man trying to force the other to admit his way was wrong. And Washun—this was what now dawned on Cal with gradually increasing shock—was winning. Already he had bent the minds of the other trainees—the other trainees of his own section who did not particularly like him—to a feeling that right was on his side. Now, he was bending Cal. And one day he would break—not bend—Ortman.

This was all wrong from Cal's viewpoint. Because from all his experience, with all the Service-type *feel* he had for this sort of situation, he knew that justice lay entirely with Ortman. Ortman was doing his best every day to instill in his Section the knowledge and attitudes that would enable them to survive and conquer in combat.

And Washun, with no more authority than that provided by a headful of half-baked, wildly impractical theories, was setting himself up to treat that knowledge and those attitudes as something slightly unclean.

Cal was disturbed enough to take a walk across to the Chaplain's library one evening, and look up a definition of *Societics* in the dictionary there.

"*Societics . . .*" he read. "*A philosophy which states that Mankind can continue to exist only by evolution into a social state in which the individual's first responsibility is to a universal code of ethics, and only secondarily to the needs of himself as an individual . . .*"

"Hell!" said Cal, disgustedly; and went to the barracks. No wonder, he thought, Societics appealed to all the weak sisters and oddballs in the race. They could leave all the dirty work to somebody else, do exactly what they wanted—and feel noble about the whole thing on top of it. He found himself impatient for the day when Ortman would finally lose his temper and rack Washun back for good.

It was not long before that happened. They had often been run through the infiltration course, crawling on their bellies over the rocky ground under full pack and with solid shell and fire jet scream-

ing by a few feet overhead. But the day came on which they were sent through during a thunderstorm. The trainees, who had started out griping about the weather conditions, discovered that the suddenly greasy mud produced a skating-like surface in which it was almost a pleasure to wriggle along. Spirits rose, they started larking about, and a trainee named Wackell either raised him self up incautiously, or a bullet dropped—as sometimes happened. He took a wad of steel from a high-powered explosive rifle through his shoulder and thigh. He began to yell, and Washun—who was nearby—went to him.

"All right," said Ortman, when they all stood dripping water and mud in Section formation back once more in front of their barracks. "You all heard it—you heard it fifty times. In combat a soldier doesn't stop to pick people up. He keeps going. Have you got anything to say to that, Washun?"

"No, Section," said Washun, staring straight ahead. Ortman had at least broken him of arguing in ranks.

"No, come on," said Ortman. "I'm sure you've got something to say. Let's hear it."

"Simply," said Washun, white-ly, staring at the mess hall opposite, "that that's to be my duty—Wing Aidman to some unit during the initial stages of an assault. Everyone knows that. I won't be car-

rying weapons, I'll be picking men like Wackell up."

"Fine," said Ortman. "You pick them up. You pick them up when the time comes. But right now you're training to be a soldier, not a Contacts Cutie—and you're going to learn a soldier doesn't stop to pick anyone up. . . . Malewski! Jones! Northwest and Southwest corners of the barracks to shag this man! Full equipment and all, Washun—get going. I'm going to run you around the mountain!"

Washun took one step forward out of ranks, right-faced and began to trot around the barracks. Malewski took a cut at him with the peeled wand that served the trainee noncoms for swagger sticks, as Washun lumbered past.

"Fall out! Shower, chow—and clean equipment!" barked Ortman at the rest of the section. "And watch that mud in the barracks!"

The orderly ranks disintegrated, as Washun came running heavily around the near side of the barracks. Without looking at him, they poured into the barracks.

Twenty minutes later, cleaned, dressed and chowed, Cal stepped once more out of the messhall with his fresh-rinsed mess kit in one hand, smoking in the cool sunset air. Across a little space from him, he saw Washun still running around the barracks, although Malewski and Jones had been relieved by two other trainee non-

comes so that they could dress and eat. Washun ran, not fast, weaving only a little, but his eyes were already glazed.

It was not unusual for a man in good condition to run an hour or more around the mountain before he gave out. There was no compulsion upon him to make speed—merely to keep going. The punishment was not physical, but mental. The barracks were large enough around so that the running man could not become dizzy; but after about a dozen circuits the mind began to lose count of the number of times the same corner had come up. The turning, rocking world out beyond the barracks took on an unreal quality, as if the running man was on a treadmill. It seemed he had run forever and that there was no end ever coming to the running. It was a small, circular hell in which the mind waited for the superbly conditioned body to give up, to quit, to collapse—while the animal-stupid body, sweating under the heavy harness of equipment, gasping for breath, ran on, struggling to prolong its own sufferings in limbo.

Ortman, of course, could stop it at any time; but probably would not.

Cal watched the running man. He still felt no kindness for Washun, and from his point of view, there was nothing wrong with running a man around the mountain. What was bothering him, he discovered, was a tricky point root-

ed in the sense of right and wrong of a professional soldier.

What bothered him was the fact that the punishment was misapplied. Running a man around the mountain was a last resort—it was like a scrub-brush shower for a trainee that refused to stay clean. It was used for a man who was a consistent goof-off and whom nothing else, probably, could save.

But Washun was not a consistent goof-off. Within certain limits he was as good as any other trainee in the section. And he was not saveable because he was lost already—to the Contacts Service. And his punishment could not serve the purpose of a good example to the rest of the Section, who did not walk in Washun's ways in any case.

Ortman, in Cal's eyes, was the Service. In letting himself be forced into going the limit with Washun, now, without adequate reason, Ortman had acknowledged his inability to conquer the Contacts Cadet. He had lost. And Washun—weaving blindly now as he ran around the unending white walls of the barracks—had won.

"Truant!"

Cal turned sharply. It was Ortman, coming up to him from the direction of the orderly room.

"Get down to the orderly room, on the double," said Ortman. "It's not exactly according to regulations for one of you trainees. But you've got some visitors."



## CHAPTER FIVE

The visitors Cal discovered in the orderly room turned out to be young Tack, Joby Loyt, and Walk Blye, from his old outfit. Joby and Tack were wearing Section's tabs, and Walk was now in an officer's gray uniform with the cloth insignia of a Warrant. They had all been drinking and Walk was well on his way to being drunk—although only someone familiar with him would have recognized the fact. The alcohol in him showed only in the fact that he moved a little more swiftly, and there was an added glitter to his eyes which a stranger might have put down to sheer liveliness but which those who knew him took for a danger signal.

"How about it, Sec?" said Walk to the Wing Section in charge of Cal's training unit. The same Wing Section who the first day had threatened them all with what Washun was now enduring on Ortman's order. "Can we take him off for a little?"

Walk, as Warrant, was only about a rank and a half above the Wing Section—an officer in privilege rather than authority. It allowed him to be more familiar with the Wing than a fully commissioned officer might. The Wing reciprocated. He thought for a second.

"He's not supposed to leave the Wing area," he answered. "But

there's a gully in those woods across the road there, if you'll have him back before bedcheck and in good shape."

"Word on it," said Walk. And the four of them left the orderly room and strolled across into the woods.

About fifty yards back, they found the gully behind a screen of yellow poplar, and made themselves comfortable in it. Thin, flat bottles of burbon appeared; and Cal learned that his old Wing, along with the original Assault Team, had moved in over on the other side of the Fort for retraining and shakedown.

"Drink up!" said Walk. And Cal drank thirstily, almost angrily. But there was an awkwardness between them that the drink could not burn away; and he could see that Tack and Joby were affected by it as he was. Walk was an enigma. It was impossible to tell how he felt. He sat in the fading twilight of the woods with them, drinking half again as much as anyone else, as they talked about previous expeditions. He seemed bored.

When he ran out of liquor and went off to get another bottle he had stashed nearby rather than carry into the Wing area, Cal commented on it to the other two.

"You have to talk very hard to get Walk along?" he asked.

"Hey, no," said Tack. "It was Walk's idea. I mean, the rest of us

never thought they'd let you loose to talk to us. He set up all of it."

Cal shook his head in puzzlement. Walk came back with the other bottle; and the light faded swiftly. The sudden-death drinking they were doing straight from the bottle was beginning to take effect, after all. For a while, time faded and it seemed like the old days. Sitting half in shadow on a stony slope of the gully, Walk drank, lowered the bottle, and crooned in a husky voice.

"—I—ain't—got—no—ma—ma," his slightly hoarse tenor floated low upon their ears. "—No woman, no baby—"

They all joined in automatically. It was the Mourn—the Assault Soldier's Mourn; and they had sung it on a hundred drunks before. Half-buried among the encroaching shadows they keened their atonal lament.

. . . to kiss.

*I ain't got no no one.*

*Nothing but—the Damnservice!*

*Left my home and I wandered.  
Never thought I'd end up like  
this.*

*Name on a T.O.<sup>1</sup> listing—  
Number in—the Damnservice!*

*I get goofed and lonely,  
Thinking of those things that I  
missed.*

*Nothing but a goddam Mule-  
brain,  
Mucked up in—the Damn-  
service!*

*Gonna get rich\* next Tuesday.  
Wednesday, if the first Drops\*  
miss.*

*Bury me where they don't find  
me,  
To plant me in—the Damn-  
service!*

The last of the twilight was almost gone as they finished singing. They had all become to each other indistinct darknesses in the deeper darkness. Cal felt the fog of the alcohol thickening in his brain, and remembered his kit, uncleaned back at the barracks.

"Got to go," he said, with a slightly unmanageable tongue. "Thanks for everything. See you."

"Yeah," it was Tack's voice. "We'll get together, you get done with this Basic junk. You come looking for us, Sec. So long."

"So long, Sec," said Joby's voice.

"Sure," this was Walk's voice, coming low and clear and hard out of blackness, "we'll see you, Gutless Wonder!"

A jarring, icy shock racked suddenly through Cal, checking him as he stood half-turned. He froze, looking back into lightlessness. Above their heads the first pale sky

\* Combat Soldiers Death Benefits—paid to the next of kin.

\* Glider and Shoulder Jet Assaults—Personnel.

<sup>1</sup> Table of Organization.

of night was showing dimly through the inky branches of the overhanging trees. But down in the gully where they were, all was steeped in black. Far off, a bird twittered sleepily.

For a moment stark silence hung between them. And then, awkwardly, forcedly, Tack began to laugh. And, a second later, just as artificially, Joby joined in. A moment later Walk was laughing, too; and then Cal.

But the laughter was not quite genuine, for all that. Cal found his fingers shaking as he fumbled out a cigaret. Ignoring its self-striking end, he scrabbled a chemical lighter from his pocket. Holding cigaret and match, he took a step toward where he knew Walk must be. He stuck the cigaret in his mouth and snapped the lighter.

The flame, springing suddenly into existence caught Walk's face hanging apparently in mid-air, his mouth open, his features contorted with laughter. Then the flame winked out.

"Got to go," said Cal. He turned and stumbled up the wall of the gully and back toward the Wing area. He heard the laughter dwindle and die behind him.

He made his way back into his own barracks building. The lights were already out, except in the squadroom where Ortman slept. The door was open; and as he passed, Cal saw the Section Leader working on reports, at his desk.

Ortman raised his head as Cal passed and for a second the two men looked at each other in silence. Then Cal moved on into the dim forest of double-decker bunks in the big room beyond.

Washun's bunk was empty. In the lower bunk beside it, the tall Cadet with the mustache was reading in the dim light escaping from Ortman's open doorway. His eyes came up from his book to fasten balefully upon Cal, as Cal passed to his own lower bunk, farther down the row. The kit still hung uncleared on the end of the bunk. Cal ignored it. He stripped to his Service shorts and T-shirt and drawled drunkenly under the covers. He closed his eyes and Walk's face, as he had seen it in that moment's illumination of the lighter, came rushing at him.

He had had to see Walk's face, in that moment. And he had seen what he had expected. The whatever it was in Walk that must always cause him to try to push things just one step further, had been at work upon him then. Walk had known that if he kept it up, one day he must push too far, must say the unforgivable to Cal. But, like an addict, he had been not able to help himself.

They had been as close as men and soldiers get in service. But they were now openly friends no more. They would have to avoid each other as much as possible, or someday they would be trapped

into a situation in which they would have to try to kill each other. Walk had done it. He had done it all on his own, brought it about himself—not because he was drunk, but because of that inner devil of his which drove him to always dare the precipice one inch further.

He had done so, knowing what he was doing. But in the sudden flare of the lighter when Cal had looked, above the wild and laughing mouth, under the officer's cap canted drunkenly over the wide, tanned brow—Walk's darkly glittering eyes had been crazy with grief.

## CHAPTER SIX

Three weeks later, Cal graduated from Basic along with Malewski, Washun, the Contacts Cadet with the mustache, and about one out of six of their original contingent from the Denver Recruitment Center. He and the two other Cadets went on to Contacts School, back at Denver Center. Cal now wore a Warrant's uniform, as Walk had; and attended three months of classes which attempted to pump him full of all there was to know about the Paumons, natives of the fourth planet of the star Bellatrix in the Orion nebula—their world, their customs and their language. To Cal's surprise, there was only a cursory five-day unit on the history of the Contacts

Service—it was only about twenty years old—and the Philosophy commonly referred to as Societics, which was usually assumed to have given rise to Contacts.

Cal graduated from Contacts School about one-third down from the top of the list, and got his Lieutenant's tabs back. He went to have another interview with General Scoby.

The thin, clear sun of September was cutting squarely across the papers on the desk in Scoby's office as Cal stepped into it this second time. The year had turned the part of the planet around Denver into mountain autumn, since they had first met; and the point of that first meeting lay many millions of miles back along the Earth's path through that space which is also time. Scoby sat as he had sat before; but the cheeta, Limpari, this time lay along a filing cabinet alongside the desk, at desk-top level, forelegs stretched out so that the light-colored puffs of her paws rested barely against the arm of Scoby's shirt, feline head laid upon those forelegs. Her animal eyes turned to Cal as he entered, but nothing else about her moved. Scoby looked up.

"Yes? What is it?"

"Truant, sir," said Cal. "You wanted to see me when I finished training and school."

"Oh, yes. Sit down—Lieutenant." Cal took a chair beside the desk.

"Yes," said Scoby, tilting back in his own chair to look at Cal. "I see you made it. . . . Tell me about the Paumons."

Cal shrugged.

"Very humanlike," he said. "Human enough almost to get by in a crowd of us. Stripped, of course, you'd notice the difference. But with clothes—they looked sort of like Eskimo stock to me. Eskimos with bad sunburns."

"Ah . . ." Scoby closed his eyes. "What are the men calling them?"

"Sir?"

"The mulebrains—and everybody else who's had Paumons briefing. What're they calling these people?"

"Oh—" said Cal. "Progs."

"Standing for what?"

"What? I don't know," said Cal.

"Just . . . Progs."

Scoby opened his eyes.

"What do you call them?"

"Me?" Cal frowned. "Sometimes I call them Progs. Or Paumons. Depends on who I'm talking to, a lot."

"Yeah," said Scoby. "You don't know it, Cal, but I've got high hopes for you. . . . Progs. Well, what about their culture?"

"Industrial," said Cal. "They've been exploring as far as the other planets in their own system; but not much more than that."

"I know that," said Scoby. "But what about their art—their philosophy?"

Cal blinked at the older man.

"I suppose they'd have some," he said. "School didn't give us anything on that."

"And of course you didn't go look it up on your own. What's the job the Contacts Service is supposed to do; can you tell me that?"

"Yes, sir," answered Cal. "Just as the Armed Services' job is to subdue the enemies of the human race, the Contacts Service's job is to lay a basis for future peaceful coexistence with those former enemies."

"Oh," said Scoby, "but you're a great little quoter, Lieutenant. Now tell me how you're going to do it?"

"Establish workable relationships with Paumons leaders and enlist their cooperation in working out future patterns of co-existence."

"Damn you!" shouted Scoby, suddenly, slamming the desk top with one hand. The cheeta's head came up like a striking cobra's, suddenly. "I didn't ask you for chapter and verse! I asked you what you're going to *do*!"

"My job," said Cal, staring into the other man's eyes. "What I'm told to do."

"And I tell you," snarled Scoby, leaning toward him, "that nobody's going to tell you what to do. You're going to do what you have to do—what you think you ought to do—you're going to have to work it all out for yourself!" He glared at

Cal. "You know why there's nothing about philosophy or art in the Paumons course? Because I told them there wasn't to be. You want to find out about these people, you go find out about them for yourself. Far as the Assault Team's concerned, you're a goddam aidman, and a goddam interpreter and a goddam headache. Far as I'm concerned, you're a goddam substitute working Christ and I expect you to produce!"

He sat glaring at Cal for a long second. Cal looked back without moving his head.

"All right," said Scoby more calmly; and Limpari put her head down again. "As I say, I expect something more of you than I do of what I ordinarily get for help. I've got a special assignment for you. Contacts Officer—with your old outfit."

Cal felt a soundless shock—it was something like the feeling that had followed Walk's last words three months before.

"Want to back out?" jeered Scoby, staring at him closely.

"No, sir," said Cal.

"Then take off." Scoby went unceremoniously back to the papers on his desk. Cal rose and left.

He had been due for a several-week course with the Medics to fit him for his aidman duties. He had planned to meet Annie that evening when she came off shift at the Service Hospital. He had

even sourly made up his mind to get to the library and do some extra-curricular reading on the Paumons, in line with what Scoby had said. None of these things took place. That afternoon even as he was walking out of Scoby's office, things were 'breaking'—as the News Services said—with the Paumons situation; and the Cabinet on Earth was being called into emergency meeting. Six hours later he was collected by military patrol and confined to base with all other uniformed personnel on a general muster order. Seventy-eight hours later, he and the rest of those connected with the Paumons Expedition Assault Force were spaceborne.

Quarters on their ship—as on all ships of the Assault Force—were close, and all experienced Service people were on their best behavior with each other. Cal met the other officers of his Wing—and Walk, who, as the only former member of the unit, was Section Commander of Section A of the Wing. He was also executive officer under Wing Captain Anders Kaluba, who now headed the outfit. Kaluba was a pleasant, dark-skinned man who had been a lieutenant with the Seventy-Second Combat Engineers against the Lehaunans. He did not seem unduly prejudiced against Contacts Officers. And Walk, when he met Cal, was almost subdued. He said little. Joby Loyt was Section Lead-

er under Walk. Tack had been promoted to Wing Section for the outfit, and he talked and acted older than before.

The Assault Force was on the jump for nine days. Fourteen hours out of destination, an order was posted for an orientation address by General Harmon, the Force Commander, to all officers and men on all ships, at X minus 1200 hours. On Cal's ship they took down the hammocks in the main troop-room and everybody crowded in, sitting crosslegged in ranks upon the cold metal flooring. At the far end of the room there was a viewing platform.

At twelve hundred hours precisely, the platform lit up with a three dimensional representation of the Force Commander's office on the flagship. It showed a desk, a wall representation of the Paumons world, and a door. At a couple of minutes past twelve, the door opened, and the image of Harmon strode out before the audience. He was wearing combat coveralls with a field dress jacket over them and a light weapons harness with, however, no weapons clipped to it. He nodded into the pickup; and a warming current ran through the audience in Cal's ship. Harmon looked slightly tired, but confident.

"I won't keep you," he said. "I want you all to turn in as soon as I'm through and get as much rest as you can."

He picked up a pointer from the

desk and turned to the wall representation of the Paumons.

"Here," he said, indicating a squarish-looking continent spreading south and west from the planet's equator, "is the high central plateau area which Intelligence has decided is the most promising location for our initial drops. The weather is uniformly clear and good at this time of year, and the terrain is both highly defensible because of its ruggedness, and adapted to our overland transport. It also overlooks the industrial centers of this key continent. You'll all be getting full details from your individual Commanders."

He laid the pointer aside and came to stand looking out over the desk at them all. There was a moment of silence in the main room of Cal's ship. Across the room, somebody coughed, and a couple of other barks answered from nearby.

"—Fort Cota hack," muttered a voice behind Cal. He shifted his haunches on the hard metal plates. Around him the room was filled with the smell of still air heavy with the odors of clothing and other mens' bodies. Jump boots squeaked on the flooring, and coveralls rustled as those about him fidgeted and shifted.

Harmon cleared his throat.

"The alien enemy," he said, "that we will be facing in a few hours is tough. We might as well

accept that fact. But—being an Alien, he is not as tough as we are. The Prog is going to find out that he's bitten off something he can't chew at all."

Harmon clasped his hands behind him and stood out from behind the desk.

"When a human being fights, he knows what he's fighting for. That's one reason we've got it all over the Alien; because the Alien doesn't know and doesn't care to know. All he knows is some other alien got him stirred up, or some sort of alien sacred cow got trampled on, or it just looks like a good opportunity for him to grab something. But it's a human being's right and duty to know what he's about; and so I'm just going to take a minute or two out here, and bring you officers and men up to date on the events that require us to be here."

Cal's underneath foot was going to sleep. He quietly uncrossed his legs, bringing the numbing one on top.

". . . as you all know," Harmon was saying. "Ours is an expanding culture and requires us to be continually on the lookout for additional living room. Three years ago, we made contact with the Bellatrix solar system and set down token bases on two of the empty, less habitable planets. At the same time we contacted the Progs to explain we were only interested in what they did not have,

and didn't intend to bother them in any way."

"—Move, will you!" hissed a man in the row behind Cal and off to his right. "You're crowding my goddam knee."

"Shove your knee!" retorted another whisper. "I haven't got any more room to move than you have."

"—however, withheld official acceptance of our presence in their solar system," Harmon's voice was continuing. "And shortly after that, less than six months ago local time, presented us with an official complaint against what they termed an offensive build-up of military equipment and personnel in these areas. We attempted to negotiate; but a month ago we were given what amounted to an ultimatum to pull out of the Bellatrix system; and ten days ago, absolute, the Prog attacked without warning and took over both our peoples and our property. Twelve hours from now, absolute, he's going to have to answer for that—to us."

Harmon's glance swept from left to right in front of him.

"That's it, Assault Soldiers. Turn in now and get some rest—and tomorrow we give 'em hell!"

He threw a slight wave of his hand, turned about, strode back through the imaged door, and out. The stage winked blank and bare. The seated men rose, grunting and stretching; and the room was suddenly overcrowded. By orderly



masses, they moved back along narrow corridors to their individual unit rooms, where the thick-hung hammocks drooped like white foliage from the low ceilings.

Pushing between the hammocks and the men climbing into them Cal heard his name called by Wing Captain Kaluba. He went toward the corner of the room that was Kaluba's.

Kaluba, because of the necessities imposed by rank and his duties, did not have a hammock, but a cot (it was no gain, as Cal knew—the hammocks were far more comfortable) and a small folding desk. He was sitting on the cot behind the desk as Cal shoved past two filled hammocks to come into view.

"Yes, sir?" said Cal.

Kaluba was stacking reports in a neat pile. He looked up.

"Oh, yes. Lieutenant—you're not to go down with the outfit on the drop. You can come later with the medics."

Cal frowned.

"Sir?" he said. "I'm supposed to be aidman for this Wing."

"I know," said Kaluba. "I've picked a couple of the older men to fill in that duty." There was an awkward pause.

"Can I ask why, Captain?" said Cal.

"I suppose so," said Kaluba. His dark face looked tired. "You're an ex-mulebrain. And it's my commission if you take an active action

in combat—you know the regulations. I think it'd be better all around if you weren't in on the drop."

"The Captain," said Cal, "doesn't trust me?"

"I don't trust your reflexes." Kaluba lowered his voice. "Fifteen hours from now, or less, some of these men will be bad hurt, and some will be dying. You dead sure you can just stand around and watch that happening?"

"That's right," said Cal.

"Well, I'm not."

"Captain," said Cal. "I think you may just have been talking yourself into something. I'm Aidman for this outfit; and you're going to need me on this drop." He kept his eyes steadily on Kaluba. "You're going to need every man on the list."

Kaluba chewed his lower lip, angrily.

"I'm trained, and I'm experienced," said Cal. "You leave me back up here and I'll write a letter of complaint to the Service accusing you of a personal bias against me. I don't think the reviewing board will think your reasons strong enough."

Kaluba's eyes flickered up at him. Then he looked down at the reports, and swore.

"All right," he said. "Get some sleep."

Cal went back to his hammock, and climbed in. Beside him, Carl Wajack, the Lieutenant officering

B Section, was lying on his back in his hammock, gazing at the ceiling ten inches away. His hairy-backed hands were gripping the edges of his hammock.

"Think of six beautiful women," Cal said to him.

"I'm all right," said Wajeck, not taking his eyes off the ceiling. "I'm just not sleepy."

They made their first wave landing thirteen hours later, the assault glider that carried Cal, along with A and B sections, screaming in at five hundred feet to eject them right and left like tossed popcorn. Cal cut wide on his shoulder jets with a short burst, and slid in to earth under a tree so like a terran cottonwood it was hard to tell the difference. The trees on windy hillsides on Lehaunan had been warped and strangely twisted like high-mountain conifers. On the world of the Griella, there had been no true trees, only a sort of large bush. But here the trees were like trees and the cut-up rocky country all around and between them greened with a heavy moss that almost resembled grass.

Cal jettisoned his jets and checked his wrist scope. All the men of the two sections were down without trouble and already moving in on the red dot which marked the location of the senior Section Commander. That would be Walk. Cal took a bearing and moved, too.

He was two thirds of the way to the twenty-foot high cluster of rock where the red dot showed, when the first Paumons seeker torp came over the small hill at his left. It flashed black for a moment in his vision like a gnat flying right into his eye; and then the rocks he was headed for went up in a graceful, vase-shaped gout of brown earth and debris.

"Spread out! Spread out!" yelled Cal, automatically. "Torps!"

He had gone down without thinking at the black flicker in his vision. Now he rose and ran, changing direction, for the rocks. When he got there, he found a crater, five dead men, a boy with one leg blown off, and Lieutenant Wajeck. Wajeck was sitting up against a rock, apparently unhurt, but hugging himself as if he was cold.

"You all right?" said Cal to Wajeck, and got no answer. Cal turned to the boy with his leg off and got a shot into him and a tourniquet around the pressure point just inside the mid-thigh. He set the tourniquet to loosen at fifteen minute intervals—the boy was out cold—and turned to Wajeck.

"What's wrong with you?" he said, and pulled at the folded arms.

"Oh, God," said Wajeck, "I knew it. Right in the middle. I knew it, I knew it."

Cal got the arms apart and

there was blood soaking through all over the stomach area of Wajeck's coveralls. There was a slit in the cloth like a torp fragment might make. Cal put his fingers in it, tore it wide, and looked inside. It was a bad hole. He got a patch on it and gave the other man a shot; but Wajeck's face was already beginning to go pinched and strange. Another torp came suddenly over the hills and Cal jerked Wajeck down with him to the ground, as the explosion went off not fifty yards from them.

"Oh, God," said Wajeck, quite plainly and clearly in Cal's ear as they lay on the ground together. "I knew it. I was sure. I knew it."

"Where's Walk?" said Cal. Another torp went off to their right.

"They switched him to Kaluba's glider. Last minute. He didn't come down with us. . . . Oh, God—"

"Where's your Section Leaders?"

"There. There. Squadmen, too—" Wajeck twitched a hand

and wrist toward the hole the torp had left and the dead bodies in and about it. "I told them to close in when we ejected. So we'd come down ready to organize."

Cal stared along six inches of dirt at Wajeck's profile, facing up at the cloudless sky.

"Didn't you learn—" Cal broke off. "Somebody's got to get these men out of here. You must have a non-com somewhere still out there."

"No one. No one," said Wajeck's lips to the sky. They stopped suddenly. Jerkily his head turned sideways; and he looked along the ground into Cal's eyes.

"You," he said. "You know what to do. Take over, for God's sake. You got to take over, Cal. Right now."

There was a shriek and a roar. A torp exploded so close to them it brought dirt raining down about them. The boy with the leg off had just come to, and he was hit again. He began screaming.

*(Concluded next month)*





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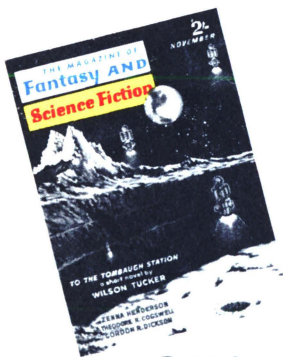
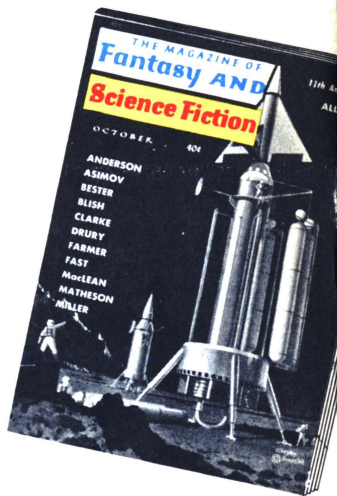
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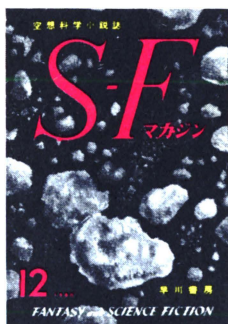
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